



The Untold Story: A Literature Review on the Psychological and related Economic Impacts of Natural Disasters on individuals in CARICOM States

*Jason Alexander, MSc &
Keon West, (DPhil) Candidate.*

*4th Caribbean Environmental Forum
Wednesday 25th, June 2008.*



CONTENT

- Rationale
- Objectives
- Methodology
- Profile of Natural Disasters in CARICOM States
- Psychological impacts of Natural Disasters
- Economic impacts of Natural Disasters
- Conclusions and Recommendations



RATIONALE

- *‘to conduct **exploratory research** to review and highlight the overlooked psychological impacts of natural disasters on individuals in CARICOM States’*
- *‘to present a more **comprehensive analysis** of disaster impacts in CARICOM States via a **bi-disciplinary approach**.’*



OBJECTIVES

1. To provide an overview of the **psychological impacts** of natural disasters on CARICOM States.
2. To broadly review the literature on the **psychological and economic impacts** of natural disasters on CARICOM States.
3. Draw some **conclusions** on the above.



METHODOLOGY

- Secondary Data:
(EM-DAT OFDA/CRED International Disaster Database)
- Country Case Studies
(OECS, USA, Nicaragua)
- Literature Review
(Regional and International Authors)



PROFILE OF NATURAL DISASTERS IN CARICOM STATES

- Types of Natural Disasters:
(Wind Storms, Floods, Earthquakes)
- Time Period: 1900-2007
- Units of Analysis:
15 Member States & 5 Associate Member States
- Total number of people **homeless**;
Total number of people **injured**; and
total number of **deaths**.



PROFILE OF NATURAL DISASTERS IN CARICOM STATES 1900 - 2007

INDICATORS (TOTAL # OF)	CARICOM MEMBER STATES (15)	CARICOM ASSOCIATE MEMBER STATES (5)	TOTAL
Homeless People	1,199,313	0	1,199,313
Injured People	8,104	292	8,397
Deaths	25,269	11	25,280



DATA EXTREMES ON NATURAL DISASTERS IN CARICOM STATES

- Most number of homeless people:
Haiti , Jamaica & Montserrat
- Most number of injured people:
Haiti, Dominica & Belize
- Most number of deaths:
Haiti, Jamaica & Dominica



PSYCHOLOGICAL IMPACTS OF NATURAL DISASTERS

- Psychological and Emotional Impacts neither recognized nor responded to.

(Stair & Pottinger 2005)

- Paucity of measures for assessing hurricane-related traumatic experiences of individuals

(Shaw et al., 2005)



PSYCHOLOGICAL IMPACTS OF NATURAL DISASTERS

- Responses to manage the psychological effects of disaster-related trauma tend to be based on little or no research.

(Michener et al., 1997)



PSYCHOLOGICAL IMPACTS OF NATURAL DISASTERS

- Anxiety;
- Depression;
- Post-traumatic Stress Symptomatology (PTSS);
- Fears (death of loved one, pet, loss of house);
- Intrusive Recollection;
- Affective Disorders;
- Regressive Behaviour;
- Change attitudes about self, world and future;



PSYCHOLOGICAL IMPACTS OF NATURAL DISASTERS

- Post-traumatic Stress Disorder (PTSD)
“persistent re-experiencing of a traumatic event”:
 1. Dreams
 2. Illusions
 3. Hallucinations
 4. Dissociative Flashbacks



PSYCHOLOGICAL IMPACTS OF NATURAL DISASTERS

- *Kutcher et al. 2005* identified possible treatments:
 1. Training medical personnel to identify anxiety, depressions, PTSD;
 2. Availability of Fluoxetine (a serotonin-specific reuptake inhibitor); and
 3. Other cognitive-behavioural treatments.



ECONOMIC IMPACTS OF NATURAL DISASTERS

- Total Damage to 20 CARICOM States was approximately,

US \$15,482,486,000.

- Countries with the most total damage for the period 1900 – 2007 included:

Cayman Islands, Jamaica & The Bahamas.



ECONOMIC IMPACTS OF NATURAL DISASTERS

GENERIC (SHORT-TERM) IMPACTS:

1. Perpetual Poverty
2. Economic Growth
3. External Balance
4. Public Finance
5. Inflation
6. Unemployment



ECONOMIC IMPACTS OF NATURAL DISASTERS

GENERIC (LONG-TERM) IMPACTS:

1. Distribution; and
2. Future Growth.



SUSTAINABLE DEVELOPMENT: ECONOMIC PERSPECTIVE:

Attzs 2005:

1. Reallocation of funds for disaster recovery;
2. Debt servicing complications; and
3. Reductions in a country's labour force.



CONCLUSIONS

1. A **multi-disciplinary approach** is absolutely necessary for analyzing the complex realities of natural disasters in CARICOM states;
2. Psychological impacts of natural disasters cannot be relegated to a secondary position. (due to tangible damage caused to infrastructure.) **Disasters affect PEOPLE, and POOR PEOPLE even more.**



CONCLUSIONS

- 3. Pre-disaster period** – Train health personnel to deal with PTSD, PTSS and other psychological conditions and treatments;
- 4. Pre-disaster period** - Public Awareness about psychological conditions and treatments should be part of any disaster preparedness strategy for all CARICOM States.



CONCLUSIONS

5. CARICOM States cannot afford to be uninformed or unmotivated, ignorant or indifferent about dealing with the psychological and economic impacts of disasters, especially given the overarching problem of Climate Change.



THE END



AUTHORS CONTACTS

Jason Alexander, MSc.

Sustainable Economic Development Unit

The University of the West Indies.

Jason.Alexander@sta.uwi.edu or mrjasonalexander@yahoo.com

1-868-662-6555

&

Keon West, (DPhil) Candidate.

Department of Experimental Psychology,

University of Oxford.

Keon.West@balliol.ox.ac.uk