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*The mission of the Harvard Humanitarian Initiative is to relieve human suffering in war and disaster by advancing the science and practice of humanitarian response worldwide.*

# CRISIS MAPPING

**CRISIS MAPPING MAINSTREAM MEDIA,  
CITIZEN JOURNALISM AND USHAHIDI  
DURING THE POST-ELECTION  
VIOLENCE IN KENYA**



# INTRODUCTION

*“CITIZEN JOURNALISTS ARE PLAYING AN INCREASINGLY IMPORTANT ROLE IN DOCUMENTING VIOLENT CONFLICT AND HUMAN RIGHTS VIOLATIONS WORLDWIDE”*



THE EVIDENCE SUPPORTING THIS CLAIM IS LARGELY ANECDOTAL...

IS CITIZEN JOURNALISM REALLY AN IMPORTANT SOURCE OF INFORMATION DURING TIMES OF CRISES?

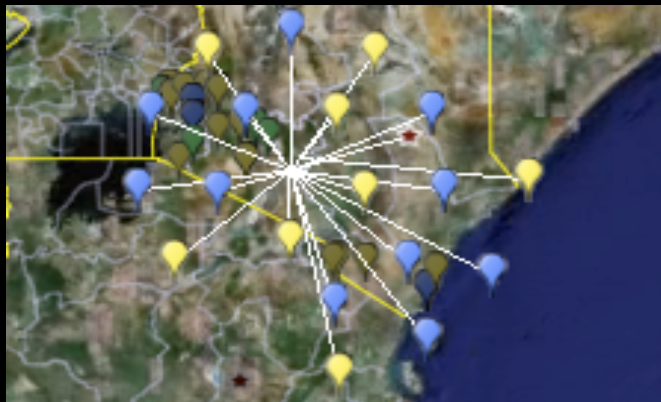
THE QUESTION WAS ORIGINALLY POSED DURING THE  
**2008 GLOBAL VOICES SUMMIT**  
HHI LAUNCHED THIS PROJECT TO FIND A MORE  
EMPIRICALLY SOUND ANSWER



# CASE STUDY

## KENYAN ELECTIONS, DEC 2007

BY ANALYZING REPORTS PRODUCED BY MAINSTREAM NEWS MEDIA (MM), CITIZEN JOURNALIST BLOGGERS (CJ) AND USHAHIDI, WE SOUGHT TO IDENTIFY THE EXTENT TO WHICH “NEW MEDIA” ENABLED EFFECTIVE AND RELIABLE SOURCES OF REAL-TIME INFORMATION COMPARED TO TRADITIONAL MAINSTREAM MEDIA.



INTERNET PENETRATION IN 2007 WAS 7% COMPARED TO 0.7% IN 2000.

MOBILE PHONE USAGE WAS 30.1% AT THE END OF 2007.

SOURCE: ITU DATA, *KENYA*



# METHODOLOGY

**EVENT-DATA ANALYSIS** WAS USED TO COMPARE MAINSTREAM NEWS MEDIA, CITIZEN JOURNALIST BLOGS AND USHAHIDI DATA.

REPORTS ON BOTH VIOLENT AND PEACEFUL EVENTS FOLLOWING THE KENYAN ELECTIONS WERE HAND CODED USING THE FOLLOWING PARAMETERS:

<b>TYPE OF EVENT</b>	<b>.1</b>
<b>DESCRIPTION</b>	<b>.2</b>
<b>CASUALTIES</b>	<b>.3</b>
<b>TIME OF REPORT</b>	<b>.4</b>
<b>LOCATION OF EVENT</b>	<b>.5</b>
<b>SOURCE OF INFO</b>	<b>.6</b>

THE DATABASE WAS THEN CONVERTED INTO A KMZ **GOOGLE EARTH LAYER** AND VISUALIZED USING GE'S ANIMATION FUNCTION.

*NB: IF 2 SOURCES REPORT SAME EVENT, ONLY THE SOURCE THAT REPORTS 1<sup>ST</sup> IS VISUALIZED*

**TIME PERIOD ANALYZED: DEC 27 – JAN 27**

**MAINSTREAM MEDIA (N = 246):**

INTERNATIONAL, REGIONAL AND NATIONAL MEDIA INCLUDING KENYAN PRINT AND BROADCAST (TV, RADIO) MEDIA.

ALL MAINSTREAM MEDIA REPORTS PROVIDED BY  
*WORLD NEWS CONNECT*

**DATA\***

\* *SEE ANNEX FOR DETAILS*

**CITIZEN JOURNALISM (N = 143):**

REPORTS BY KENYA'S LEADING BLOGGERS

**USHAHIDI (N = 217):**

CROWDSOURCING CRISIS INFORMATION



# LIMITATIONS

**GEO-REFERENCING:** 34% OF NEWS REPORTS AND 37% OF CJ REPORTS DID NOT INCLUDE SPECIFIC LOCATION INFORMATION AND WERE THEREFORE NOT CODED

**CJ READERSHIP:** ACTUAL READERSHIP OF INDIVIDUAL BLOGS WAS DIFFICULT TO TRACK; THUS ACTUAL DISSEMINATION OF INFORMATION WAS HARD TO DETERMINE

**SMS TEXTING:** MANY CJ UPDATES CAME FROM SECOND-HAND REPORTS VIA SMS, WHICH IS DIFFICULT TO MEASURE. ONLY GENERAL TRENDS COULD BE TRACKED.





# FINDINGS

## MAINSTREAM MEDIA:

MAINSTREAM MEDIA REPORTED ACTUAL DEATH COUNT \*  
BEFORE CJs, HOWEVER, ON MANY ACCOUNTS,  
REPORTED NOTHING ON GIVEN AREA  
PRIOR TO DEATHS

MAINSTREAM MEDIA REPORTS DO NOT OVERLAP \*  
SUBSTANTIALLY WITH CJ REPORTS AND USHAHIDI REPORTS

threatened, chaos in Eldoret, 40-50K people held up in compounds, no running water or electricity, Karamojong fighters joining in

Accounts of possible chaos in Mombasa, bridges blown up in Lugari, people from Kikuyu, Kisii or Bukušu were forced to leave  
g people, bridges blown around the country, fighting in Uasin Gishu, media blackout Food shortage, police stopping all the c  
d mob of thousands headed to Burnt Forest, no cell phone air time. Analysis of how problem came to be Food shortage, police



# FINDINGS

## CITIZEN JOURNALISM:

CJS TENDED TO REPORT AS SOON AS VIOLENCE \*  
STARTED, WELL BEFORE MAINSTREAM MEDIA

COMMENT COUNT SHOWED DIRECTIONAL INCREASE \*  
AS THE MONTH WENT ON, OR DURING PARTICULAR  
PERIODS OF VIOLENCE

COMMENT SECTION ALSO USED AS MEDIUM \*  
FOR REAL-TIME UPDATING

MANY BLOGGERS USED REAL-TIME UPDATES SENT TO \*  
THEM VIA SMS (PRIMARILY FROM RURAL AREAS)

CITIZEN JOURNALISM REPORTS DECLINED AFTER \*  
MAJOR LAUNCH OF USHAHIDI ON 6 JANUARY





# FINDINGS

## USHAHIDI:

USHAHIDI USE INCREASED SIGNIFICANTLY \*  
AND PROMINENTLY AFTER MAJOR  
LAUNCH ON 6 JANUARY.

USHAHIDI REPORTS DOCUMENT AN IMPORTANT \*  
NUMBER OF VIOLENT EVENTS NOT REPORTED  
BY MAINSTREAM MEDIA AND  
CITIZEN JOURNALISTS

CONTRARY TO NEWS MEDIA AND CJ REPORTS, \*  
USHAHIDI DATA ALWAYS HAD SPECIFIC  
LOCATION INFORMATION

USHAHIDI REPORTS COVERED A WIDER \*  
GEOGRAPHICAL AREA THAN BOTH  
NEWS MEDIA AND CJ REPORTS



# NEXT STEPS

**GEORGIA:** CASE STUDY ON NEWS COVERAGE  
DURING RUSSIAN INVASION

**ARMENIA:** CASE STUDY ON NEWS COVERAGE DURING ELECTIONS

**CALL FOR COLLABORATION:**

INTERESTED IN JOINING THE TEAM?  
SEE CONTACT EMAIL BELOW!



# THE TEAM

**PROJECT COORDINATOR:** PATRICK MEIER, HHI

**PROJECT SUPPORT:** KATE BRODOCK, OTHER SIDE

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# THANKS TO...

**USHAHIDI:** FOR DATA SHARING

**GLOBAL VOICES SUMMIT:** FOR INSPIRING  
THE PROJECT

**HUMANITY UNITED:** FOR SUPPORTING CRISIS MAPPING

**CITIZEN JOURNALISTS:**  
FOR YOUR COMMITMENT



# ANNEX

## CITIZEN BLOGS

- \* GLOBAL VOICES
- \* KENYAN PUNDIT
- \* THINKER'S ROOM
- \* MENTAL ACROBATICS
- \* KUMEKUCHA
- \* KENYAN JURIST
- \* ROB ROOKER
- \* ODEGLE NYANG
- \* 8 MONTHS IN KENYA
- \* LOST WHITE KENYAN CHICK
- \* WHAT AN AFRICAN WOMAN THINKS
- \* AFROMUSINGS
- \* VIGILANTE JOURNALIST

## MAINSTREAM MEDIA

- KBC RADIO \*
- INOORO RADIO \*
- NATION TELEVISION \*
- KBC TELEVISION \*
- KTN TELEVISION \*
- KBC ONLINE \*
- DAILY NATION NEWSPAPER \*
- STANDARD NEWSPAPER \*
- AGENCE FRANCE PRESS (AFP) \*
- ITAR-TASS \*
- NEW VISION \*

## USHAHIDI

- \* SEE USHAHIDI.COM