

# Endnotes

- <sup>1</sup> <http://www.ft.com/cms/s/0/f317a12e-5acc-11de-8c14-00144feabdc0.html> accessed 1 Oct 2009.
- <sup>2</sup> Kucera, J., "What if Twitter is leading us all astray in Iran," <http://trueslant.com/joshuakucera/2009/06/15/what-if-we-are-all-wrong-about-iran/> accessed 1 Oct 2009.
- <sup>3</sup> Human Security Report Project, "mini-atlas of Human Security," <http://www.miniatlasofhumansecurity.info/en/access.html> accessed 1 Oct 2009.
- <sup>4</sup> Data transferred to new Global Terrorism Database, <http://www.start.umd.edu/gtd/> accessed 1 Oct 2009.
- <sup>5</sup> Hughes, A., L. Palen, J. Sutton, S. Liu, and S. Vieweg, "Site-Seeing" in Disaster: An Examination of On-Line Social Convergence, connectivIT lab & the Natural Hazards Center, University of Colorado, Boulder, May 2008.
- <sup>6</sup> *Ibid.*
- <sup>7</sup> International Telecommunication Union, *Measuring the Information Society—The ICT Development Index*, March 2009.
- <sup>8</sup> This is a 2007 figure.
- <sup>9</sup> [http://www.comscore.com/Press\\_Events/Press\\_Releases/2009/1/Global\\_Internet\\_Audience\\_1\\_Billion](http://www.comscore.com/Press_Events/Press_Releases/2009/1/Global_Internet_Audience_1_Billion)
- <sup>10</sup> <http://www.internetworldstats.com/stats.htm> accessed 1 Oct 2009
- <sup>11</sup> World Bank, *Information and Communications for Development 2009: Extending Reach and Increasing Impact*, 2009., <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTINFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/EXTIC4D/0,,contentMDK:22229759~menuPK:5870649~pagePK:64168445~piPK:64168309~theSitePK:5870636,00.html> accessed 1 Oct 2009
- <sup>12</sup> Universal McCann, "Wave.4. Power to the People. Social Media Tracker," July 2009.
- <sup>13</sup> Schonfeld, E., "Facebook Is Now the Fourth Largest Site In The World," 4 Aug 2009, <http://www.techcrunch.com/2009/08/04/facebook-is-now-the-fourth-largest-site-in-the-world>.
- <sup>14</sup> [http://www.comscore.com/Press\\_Events/Press\\_Releases/2009/2/India\\_Social\\_Networking/\(language\)/eng-US](http://www.comscore.com/Press_Events/Press_Releases/2009/2/India_Social_Networking/(language)/eng-US), accessed 1 Oct 2009.
- <sup>15</sup> Cheng, A., M. Evans, and H. Singh, "Inside Twitter: an in-depth look inside the Twitter world," sysomos, June 2009.
- <sup>16</sup> International Federation of Red Cross and Red Crescent Societies, *World Disasters Report 2005*, <http://www.ifrc.org/publicat/wdr2005/>, accessed 1 Oct 2009.
- <sup>17</sup> "Disaster-prone Bangladesh trials cell phone alerts," Reuters, <http://www.alertnet.org/thenews/newsdesk/SP256907.htm>.
- <sup>18</sup> "Disaster reduction and the human cost of disaster," UN OCHA IRIN News, <http://www.plusnews.org/Report.aspx?ReportId=62446#at> accessed 1 Oct 2009.
- <sup>19</sup> In Aceh, for example, mobile network traffic jumped by 25 to 30%. [http://ioc-unesco.org/hab/components/com\\_oe/oe.php?task=download&id=3771&version=1.0=1&format=2](http://ioc-unesco.org/hab/components/com_oe/oe.php?task=download&id=3771&version=1.0=1&format=2) accessed 1 Oct 2009
- <sup>20</sup> "Nearly 2.1m text Live 8 to make it most successful SMS push," <http://www.brandrepublic.com/news/479891/nearly-21m-text-live-8-successful-sms-push/>.
- <sup>21</sup> "Girl, 10, uses geography lessons to save lives." *Daily Telegraph*, 1 January 2005.
- <sup>22</sup> See for example, 'Tsunami Came Too Fast for Warnings to Reach All,' Wall Street Journal, 1 October 2009, <http://online.wsj.com/article/SB125429147125151927.html>, accessed 2 Oct 2009.
- <sup>23</sup> Samarajiva, R., Mobilizing information and communications technologies for effective disaster warning: lessons from the 2004 tsunami, *New Media & Society*, 7(6):731-747, 2005.
- <sup>24</sup> Wall, I., "Where's My House?," UNDP, August 2005, [http://www.humanitarianinfo.org/srilanka/catalogue/Files/Info%20Centre/TEC/TEC020\\_undp\\_Wheres\\_my\\_house\\_20050905.pdf](http://www.humanitarianinfo.org/srilanka/catalogue/Files/Info%20Centre/TEC/TEC020_undp_Wheres_my_house_20050905.pdf), accessed 1 Oct 2009.
- <sup>25</sup> <http://www.ewc3.org>.
- <sup>26</sup> International Federation of Red Cross and Red Crescent Societies, *World Disasters Report 2005*, <http://www.ifrc.org/publicat/wdr2005/>, accessed 1 Oct 2009.
- <sup>27</sup> <http://www.reliefweb.int/telecoms/tampere/index.html>.
- <sup>28</sup> "New Media and Development Communication," <http://www.columbia.edu/itc/sipa/nelson/newmediadev/Emergencies.html>, accessed 2 Oct 2009.
- <sup>29</sup> "Status Quo Of The Tsunami Early Warning System For The Indian Ocean," Science Daily, <http://www.sciencedaily.com/releases/2007/12/071220110327.htm>, accessed 2 Oct 2009.
- <sup>30</sup> <http://www.itu.int/ITU-D/wtdc06/DohaDeclaration.html>.
- <sup>31</sup> United Nations International Strategy for Disaster Reduction Secretariat, *Global Assessment Report on Disaster Risk Reduction (2009)*, United Nations, Geneva, Switzerland, 2009, <http://www.preventionweb.net/english/hyogo/gar/report/index.php?id=9413>, accessed 2 Oct 2009.
- <sup>32</sup> Nyheim, D., *Preventing Violence, War and State Collapse: The Future of Operational Conflict Early Warning and Response Systems*, OECD, on behalf of The DAC Network on Conflict, Peace, and Development Co-operation and the DAC Fragile States Group, 2009, [http://www.oecd.org/document/41/0,3343,en\\_2649\\_3369\\_3550\\_42233001\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/41/0,3343,en_2649_3369_3550_42233001_1_1_1_1,00.html), accessed 1 Oct 2009.
- <sup>33</sup> Meier, P., "Fourth-Generation Early Warning Systems," 2009, <http://earlywarning.wordpress.com/2009/03/06/fourth-generation-early-warning-systems>.

- <sup>34</sup> Nyheim, D., *Preventing Violence, War and State Collapse: The Future of Operational Conflict Early Warning and Response Systems*, OECD, on behalf of The DAC Network on Conflict, Peace, and Development Co-operation and the DAC Fragile States Group, 2009, [http://www.oecd.org/document/41/0,3343,en\\_2649\\_33693550\\_42233001\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/41/0,3343,en_2649_33693550_42233001_1_1_1_1,00.html), accessed 1 Oct 2009.
- <sup>35</sup> Udu-gama, N., *Mobile Cell Broadcasting for Commercial Use and Public Warning in the Maldives*, Lirneasia, August 2009, [http://lirneasia.net/wp-content/uploads/2009/07/CB\\_Maldives\\_FINAL\\_2009\\_041.pdf](http://lirneasia.net/wp-content/uploads/2009/07/CB_Maldives_FINAL_2009_041.pdf), accessed 2 Oct 2009.
- <sup>36</sup> “Bangladesh develops instant early disaster warnings through cell phones,” 4 June 2009, <http://www.undp.org.bd/info/events.php?newsid=421&t=In%20News>.
- <sup>37</sup> *Global Survey of Early Warning System: An Assessment of Capacities, Gaps and Opportunities toward Building a Comprehensive Global Early Warning System for All Natural Hazards*, A report prepared at the request of the Secretary-General of the United Nations (Pre-print version released at the Third International Conference on Early Warning, Bonn, 27-29 March 2006), <http://www.ewc3.org>.
- <sup>38</sup> Robinson, L. and I. Wall., *Left in the Dark: The Unmet Need for Information in Humanitarian Response*. BBC World Trust, November 2008. [http://downloads.bbc.co.uk/worldservice/trust/pdf/humanitarian\\_response\\_briefing.pdf](http://downloads.bbc.co.uk/worldservice/trust/pdf/humanitarian_response_briefing.pdf)
- <sup>39</sup> Gilbert, C., “Studying Disaster: Changes in the Main Conceptual Tools,” in Quarantelli, E. L. ed. *What is a Disaster? Perspectives on the Question*, Routledge, London and New York, 1998.
- <sup>40</sup> Howe, J., “The Rise of Crowdsourcing,” *Wired*, June 2006, <http://www.wired.com/wired/archive/14.06/crowds.html>.
- <sup>41</sup> International Federation of Red Cross and Red Crescent Societies, *World Disasters Report 2005*, <http://www.ifrc.org/publicat/wdr2005/>, accessed 1 Oct 2009.
- <sup>42</sup> Robinson, L. and I. Wall., *Left in the Dark: The Unmet Need for Information in Humanitarian Response*. BBC World Trust, November 2008. [http://downloads.bbc.co.uk/worldservice/trust/pdf/humanitarian\\_response\\_briefing.pdf](http://downloads.bbc.co.uk/worldservice/trust/pdf/humanitarian_response_briefing.pdf)
- <sup>43</sup> <http://www.voicesofthevulnerable.net>.
- <sup>44</sup> [http://portal.unesco.org/en/ev.php-URL\\_ID=45001&URL\\_DO=DO\\_PRINTPAGE&URL\\_SECTION=201.html](http://portal.unesco.org/en/ev.php-URL_ID=45001&URL_DO=DO_PRINTPAGE&URL_SECTION=201.html)
- <sup>45</sup> GIVAS Concept Paper, 2009.
- <sup>46</sup> EPIC Concept Paper, 2009
- <sup>47</sup> World Vision, *Last Mile Mobile Solutions: Enhancing Food Aid Management Through Innovation*, 2009.
- <sup>48</sup> “US Calls for UN Aerial Surveillance to Detect Preparations for Attacks,” <http://irevolution.wordpress.com/2009/08/14/un-aerial-surveillance>.
- <sup>49</sup> <http://www.fordham.edu/halsall/mod/1960summit-statements1.html>.
- <sup>50</sup> <http://shr.aaas.org/geotech>.
- <sup>51</sup> <http://isferea.jrc.ec.europa.eu/Pages/default.aspx>.
- <sup>52</sup> “Ushahidi: From Croudsourcing to Crowdfeeding,” March 2009, <http://irevolution.wordpress.com/2009/03/27/ushahidi-from-croudsourcing-to-crowdfeeding>.
- <sup>53</sup> See *Wireless Technology for Social Change: Trends in Mobile Use by NGOs*, United Nations Foundation and Vodafone Group Foundation Report, April 2008, for a case study.
- <sup>54</sup> *The Kenyan 2007 Elections and their Aftermath: the role of media and communication*. Policy Briefing no 1, BBC World Service Trust, April 2008, [http://downloads.bbc.co.uk/worldservice/trust/pdf/kenya\\_policy\\_briefing\\_08.pdf](http://downloads.bbc.co.uk/worldservice/trust/pdf/kenya_policy_briefing_08.pdf). See also Heacock, R. *Mobile Activism in African Elections: A Comparative Case Study*, DigiActive Research Series, March 2009.
- <sup>55</sup> Goldstein, J. and J. Rotich, *Digitally Networked Technology in Kenya’s 2007–2008 Post-Election Crisis*, Berkman Center for Internet and Society, September 2008, [http://cyber.law.harvard.edu/publications/2008/Digitally\\_Networked\\_Technology\\_Kenyas\\_Post-Election\\_Crisis](http://cyber.law.harvard.edu/publications/2008/Digitally_Networked_Technology_Kenyas_Post-Election_Crisis).
- <sup>56</sup> The World Food Programme is the leader of the UN Telecoms Cluster.
- <sup>57</sup> Miguel, E., S. Satyanath, and E. Sergenti, Economic Shocks and Civil Conflict: An Instrumental Variables Approach, *Journal of Political Economy*, 112:4, 2004.
- <sup>58</sup> Brewin, Mike. 2008. Evaluation of Concern Kenya’s Kerio Valley Cash Transfer Pilot (KVCTP). Dublin, Ireland: Concern Worldwide. Available at <http://www.concern.net/documents/1244/KenyaCashTansferPilot-EvaluationReport-July08.pdf>.
- <sup>59</sup> The BBC’s Persian TV service received many more.
- <sup>60</sup> “Iran: Myth and reality about Twitter,” July 2009, <http://global-voicesonline.org/2009/07/04/iran-myth-and-reality-about-twitter>.
- <sup>61</sup> <http://webecologyproject.org>.
- <sup>62</sup> <http://www.alex.com/siteinfo/twitter.com>.
- <sup>63</sup> <http://blog.sysomos.com/2009/06/21/a-look-at-twitter-in-iran/>.
- <sup>64</sup> <http://www.wired.com/dangerroom/2009/06/iran-before-you-have-that-twitter-gasm>.
- <sup>65</sup> <http://techpresident.com/blog-entry/iran-independence-day-and-limits-online-politics>.
- <sup>66</sup> <http://www.heritage.org/Research/InternetandTechnology/bg2300.cfm>.
- <sup>67</sup> *Ibid.*
- <sup>68</sup> *Ibid.*
- <sup>69</sup> <http://www.gauravonomics.com/blog/real-time-citizen-journalism-in-mumbai-terrorist-attacks/>.
- <sup>70</sup> <http://www.gdacs.org>.

- <sup>71</sup> GDACS collects news, damage maps, and humanitarian situation reports automatically from over 1,000 online sources, including Relief Web and AlertNet. JRC contributes with the European Media Monitor system.
- <sup>72</sup> [http://www.ted.com/talks/lang/eng/larry\\_brilliant\\_wants\\_to\\_stop\\_pandemics.html](http://www.ted.com/talks/lang/eng/larry_brilliant_wants_to_stop_pandemics.html).
- <sup>73</sup> <http://www.unitar.org/unosat>.
- <sup>74</sup> <http://irevolution.wordpress.com/2009/02/08/gis-technology-for-genocide-prevention>.
- <sup>75</sup> <http://www.ithaca.polito.it/projects/uav.php>.
- <sup>76</sup> The International Charter aims at providing a unified system of space data acquisition and delivery to those affected by natural or man-made disasters through Authorized Users. Each member agency has committed resources to support the provisions of the Charter and thus is helping to mitigate the effects of disasters on human life and property. <http://www.disasterscharter.org/home>
- <sup>77</sup> <http://www.frontlinesms.com>.
- <sup>78</sup> <http://www.kiwanja.net/blog/2009/02/frontlinesms-peacebuilding-in-afghanistan/>.
- <sup>79</sup> <http://news.bbc.co.uk/2/hi/technology/6570919.stm>.
- <sup>80</sup> <http://www.kiwanja.net/blog/2008/07/zimbabweans-speak-out-through-sms/> and <http://www.kiwanja.net/blog/2008/04/kubatana-reaches-out-with-frontlinesms-in-zimbabwe/>.
- <sup>81</sup> <http://www.textually.org/textually/archives/2005/01/006675.htm>.
- <sup>82</sup> Brewin, Mike. 2008. Evaluation of Concern Kenya's Kerio Valley Cash Transfer Pilot (KVCTP). Dublin, Ireland: Concern Worldwide. Available at <http://www.concern.net/documents/1244/KenyaCashTransferPilot-EvaluationReport-July08.pdf>.
- <sup>83</sup> Mohapatra, S., G. Joseph, and D. Rath, *Remittances and Natural Disasters: Ex-post Response and Contribution to Ex-ante Preparedness*, World Bank Policy Research Working Paper 4972, June 2009.
- <sup>84</sup> Collins, D., J. Morduch, S. Rutherford, and O. Ruthven, *Portfolios of the Poor: How the World's Poor Live on \$2 a Day*, Princeton University Press, 2009.
- <sup>85</sup> *The Transformational Potential of M-Transactions*, Vodafone Public Policy Series number 7, July 2007, <http://www.vodafone.com/publicpolicyseries>.
- <sup>86</sup> <http://www.souktel.org>.
- <sup>87</sup> *Ibid.*
- <sup>88</sup> Souktel's Gaza Relief campaign overview.
- <sup>89</sup> "Gaza Mapping Initiatives," Reuters AlertNet, <http://www.alertnet.org/thefacts/reliefresources/123124884240.htm>.
- <sup>90</sup> Interview with Jacob Korenblum, 13 July 2009.
- <sup>91</sup> *Ibid.*
- <sup>92</sup> *Ibid.*
- <sup>93</sup> *JobMatch* was launched in Somaliland in June 2009.
- <sup>94</sup> <http://www.souktel.org/About.htm>.
- <sup>95</sup> This draws on research done for *India: The Impact of Mobile Phones*, Vodafone Public Policy Series No. 9, January 2009.