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**NAVAL
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MONTEREY, CALIFORNIA

THESIS

**HUMAN TRAFFICKING: THE HIDDEN AFTERMATH
OF U.S. NATURAL DISASTERS**

by

Carrie B. Eichelberger

March 2020

Co-Advisors:

Cristiana Matei
Anders Strindberg (contractor)

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**HUMAN TRAFFICKING: THE HIDDEN AFTERMATH
OF U.S. NATURAL DISASTERS**

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Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(HOMELAND SECURITY AND DEFENSE)**

from the

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ABSTRACT

This thesis explores common factors associated with both victims of human trafficking and vulnerable populations in post-natural-disaster environments. This research aimed to prove post-natural-disasters can lead to human trafficking crimes. The research identified social, economic, and human security factors that are present in both human trafficking and natural disaster environments. Volatility in these categories destabilizes and disrupts multiple aspects of a community, consequently leading to individuals being more susceptible to trafficking. The findings of this research also indicate that the identified factors have universal applicability regardless of disaster type, culture, or geographic location. Disaster survivors are not the only vulnerable population, but other populations, such as disaster workers, are also susceptible to trafficking. Gaining an in-depth perspective on the common vulnerabilities linking human trafficking and natural disasters can help officials develop strategies to assist with combating trafficking activities in a post-disaster environment and protect individuals who are in a compromised state after enduring a life-altering disaster event.

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LIST OF ACRONYMS AND ABBREVIATIONS

BLS	Bureau of Labor Statistics
DHS	Department of Homeland Security
DOL	Department of Labor
FEMA	Federal Emergency Management Agency
HHS	Department of Health and Human Services
ILO	International Labour Organization
IMO	International Organization for Migration
INTERPOL	The International Criminal Police Organization
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration
TIP	Trafficking in Persons Report
TVPA	The Trafficking Victims Protection Act
UN	United Nations
UNDRR	United Nations Office for Disaster Risk Reduction
UNICEF	United Nations Children's Fund

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EXECUTIVE SUMMARY

Human trafficking occurs when vulnerable people are exploited. One reason people fall prey to trafficking is situational vulnerabilities.¹ Natural disasters exemplify a situational vulnerability where lives are disrupted on many levels. As a consequence of a disaster, a person's home, job, and overall stability may be lost, which places that individual in a vulnerable state. Human trafficking actors can seize on the abrupt change in one's life. This thesis seeks to analyze how a post-disaster environment contributes to the human trafficking problem.

By evaluating multiple cases of human trafficking, as well as, several natural disaster incidents, this research determined common vulnerability factors: economic, social, and human security. Various types of post-natural-disaster environments including hurricanes, earthquakes, fires, and tsunamis around the world exhibited these factors. In addition, the factors commonly appeared in various types of human trafficking crimes which included sex trafficking, labor trafficking, and the trafficking of children. Regardless of culture, economic status, or location, the factors remained consistent, leading to the conclusion that post-disaster environments are susceptible to human trafficking in the United States and around the globe.

Known human trafficking cases tied directly to natural disasters have been evaluated for these factors. This evaluation strongly indicates the proposed causal relationship hypothesized by this theoretical framework. This research seeks to contribute to the discussion about trafficking in post-disaster environments with the intent to help combat future trafficking actions. The diagram in Figure 1 outlines specific indicators that create vulnerabilities for trafficking actors to exploit in post-disaster environments.

¹ United Nations Office on Drugs and Crime, *Abuse of a Position of Vulnerability and Other "Means" Within the Definition of Trafficking in Persons* (New York: United Nations, 2013), 3, https://www.unodc.org/documents/human-trafficking/2012/UNODC_2012_Issue_Paper_-_Abuse_of_a_Position_of_Vulnerability.pdf.

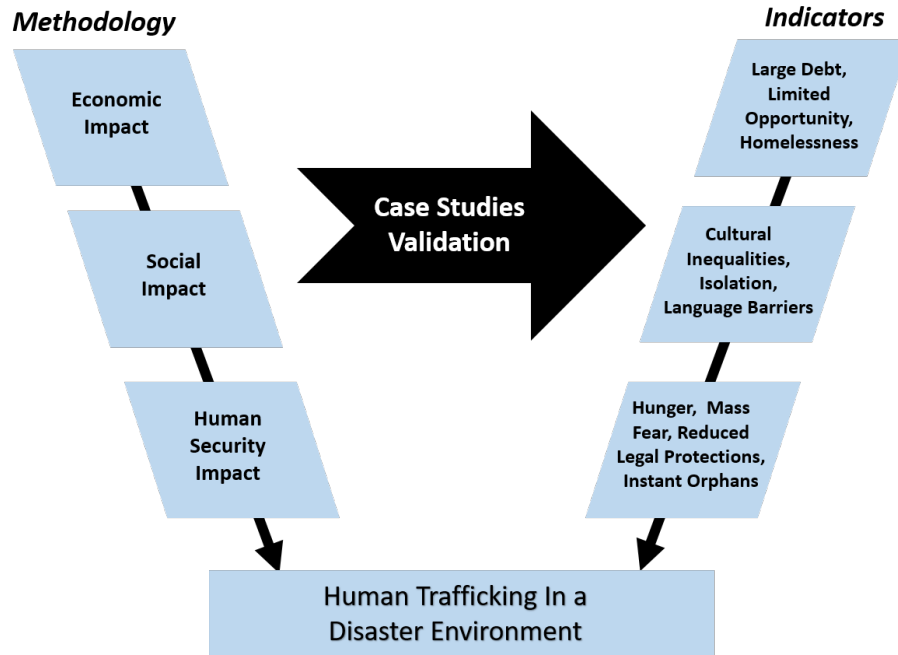


Figure 1. Illustration Demonstrating How Case Studies Validate Theoretical Model²

From this research, economic disparity and economic inequality produced a significant vulnerability for human trafficking. Natural disasters create such a sudden instability in a community that some basic needs cannot be met, making individuals vulnerable to traffickers. A notable example of this situation would be the 1991 firestorm which killed 25 people and destroyed thousands of homes in the Oakland Hills community, a wealthy area near San Francisco, California, turning an entire community of financially sound homeowners into homeless people.³ This example demonstrates that even a previously stable community can experience economic instability that makes it vulnerable.

Beyond economic concerns, social inequality contributes to human trafficking in post-disaster environments. Natural disasters disrupt social norms and cause sudden asset loss and possible unemployment for individuals. In addition, disaster survivors experience

² Source: Diagram created by author.

³ Frances L. Edwards, "Homes Wiped Away by Natural Disasters," *Public Manager* 40, no. 4 (Winter 2011): 32, ProQuest.

a disruption in community social resources such as education access, non-profit assistance, shelters, etc. Disaster survivors who have insurance, disposable income, more assets, and job security may receive priority for recovery assistance in a post-disaster circumstance. The disruption in social systems and the potential for a hierarchy of help based on social status can disadvantage members of the society. As a result, social inequalities created or exacerbated from a natural disaster can leave people more susceptible to being exploited by human trafficking actors. For example, one of the deadliest disasters of all time, the 2004 Boxing Day tsunami, impacted 13 countries and exemplified how the interruption of already limited social resources exacerbated trafficking problems in a post-disaster environment.⁴ One year after the tsunami struck, Indonesian officials had identified 625 human trafficking victims; this jump represents more than a 500% increase over reported cases before the tsunami.⁵ This example shows how social inequality in post-disaster environments can contribute to human trafficking.

Finally, human security is a significant factor in producing a volatile circumstance for human trafficking actions after natural disasters. The UN coined this term in 1994 and changed the primary security emphasis from the state to the individual.⁶ Human security centers around the concept of individuals' basic needs being met and possessing a reasonable feeling of safety. The 2011 Tohoku earthquake and tsunami in Japan illustrates human security being compromised. This disaster had many consequences including a nuclear emergency.⁷ Japan faced a major human security issue due to widespread radiation

⁴ Kathryn Reid, "2004 Indian Ocean Tsunami: Facts, FAQs, and How to Help," World Vision, December 31, 2018, <https://www.worldvision.org/disaster-relief-news-stories/2004-indian-ocean-tsunami-facts>.

⁵ Samantha Stout, "Human Trafficking in the Wake of Natural Disasters: Is the United States Any Different Than Third World Countries?" (Accounting Undergraduate Honors Thesis, Fayetteville, AR, University of Arkansas, Fayetteville, 2018), <https://scholarworks.uark.edu/acctuht/27>.

⁶ United Nations Development Programme, *Human Development Report 1994* (New York: Oxford University Press, 1994), 24, http://hdr.undp.org/sites/default/files/reports/255/hdr_1994_en_complete_nostats.pdf.

⁷ John P. Rafferty and Kenneth Pletcher, "Japan Earthquake and Tsunami of 2011," in *Encyclopedia Britannica*, January 17, 2020, <https://www.britannica.com/event/Japan-earthquake-and-tsunami-of-2011>.

exposure.⁸ Many people had to migrate out of the area without having jobs or places to live. Thus, the disruption of human security from a disaster can have immediate and long lasting impacts on individuals and communities. Lacking human security safeguards creates a major vulnerability that can be exploited by human traffickers.

Beyond examples that demonstrate these factors' relevance, evaluating actual human trafficking cases that occurred in post-natural-disaster environments brings a full perspective to the gravity of this problem. In August of 2005, the catastrophic Hurricane Katrina devastated multiple states.⁹ In Louisiana alone, the storm displaced over 50,000 people creating a massive response and recovery project resulting in economic, social, and human security consequences.¹⁰ The instability created by the hurricane left many susceptible to trafficking. Labor trafficking was a major problem after Hurricane Katrina, as an estimated 3,700 workers or more from 10 different countries were victimized.¹¹ Thus, a broad scope of trafficking opportunities relate to natural disasters.

This research concludes that natural disasters and human trafficking share a significant and relevant link. The rise in global disaster activity and the persistence of human trafficking crimes each year further reveal the importance of additional research and discussion of this topic. Finding strategic ways to address the economic, social, and human security issues that arise in a post-disaster environment could prevent future trafficking cases. Some recommendations to counter these issues would be public awareness, emergency responder preparedness, improved education, and changes in legislation. Communities and individual are incredibly vulnerable in a post-disaster setting

⁸ Christopher Hobson, *Rethinking Human Security after the 2011 Tohoku Earthquake, Tsunami and Nuclear Accident*, Fukushima Global Communication Programme Working Paper Series, Number 01 (Tokyo, Japan: United Nations University, 2014), 6, https://collections.unu.edu/eserv/UNU:2759/FGC_WP_01_March_2014.pdf.

⁹ Committee on Homeland Security and Governmental Affairs, *Hurricane Katrina: A Nation Still Unprepared: Special Report of the Committee on Homeland Security and Governmental Affairs, United States Senate, Together with Additional Views*, S. Rept. 109-322 (Washington, DC: U.S. Government Printing Office, 2006), 8, <https://www.congress.gov/109/crpt/srpt322/CRPT-109srpt322.pdf>.

¹⁰ Encyclopaedia Britannica, "Hurricane Katrina," Encyclopaedia Britannica, January 3, 2020, <https://www.britannica.com/event/Hurricane-Katrina>.

¹¹ Stephanie Hepburn and Rita J. Simon, *Human Trafficking Around the World: Hidden in Plain Sight* (New York: Columbia University Press, 2013), 17.

due to no fault of their own, and protecting and securing these areas and populations from horrific humanitarian crimes should be a priority.

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I. INTRODUCTION

This introduction evaluates the research problem and outlines the process and methodology behind this research. The intent is to provide a detailed understanding of the purpose and overall objective of this research.

A. PROBLEM STATEMENT

Modern human slavery is a continuing problem in the United States, and the number of cases and reported trafficking calls increase each year. Human trafficking incidents have been reported in all 50 states with over 4,000 calls received through the National Human Trafficking Hotline in 2018 alone.¹ According to the Global Slavery Index, in 2016 alone approximately 403,000 trafficking victims residing in the United States.² These shocking statistics point to the attractiveness of the United States a desirable destination for trafficking. But what makes our country susceptible to human trafficking?

Situational vulnerabilities are a well-documented explanation for human trafficking.³ If a sudden change in an individual's life or environment occurs, traffickers can manipulate this weakness and lure the person into a trafficking situation. Natural disasters pose a particular situational vulnerability because of the interruption or elimination of multiple community systems and structures which in turn disrupts access to the basic needs of the population.

Natural disasters are becoming more frequent and costlier than ever. In 2017, natural disaster affected over half the world's population, approximately 4.2 billion people.⁴ That year particularly impacted the United States as multiple catastrophic natural

¹ "National Statistics," National Human Trafficking Hotline, accessed March 28, 2019, <https://humantraffickinghotline.org/states>.

² Minderoo Foundation, "Country Studies: United States," Global Slavery Index, 2018, <https://www.globalslaveryindex.org/2018/findings/country-studies/united-states/>.

³ United Nations Office on Drugs and Crime, *Abuse of a Position of Vulnerability and Other "Means" Within the Definition of Trafficking in Persons*, 3.

⁴ Centre for Research on the Epidemiology of Disasters, "Natural Disasters in 2017" (Brussels, Belgium: Institute Health and Society, Universite Catholique de Louvain, February 7, 2018), 3, https://cred.be/sites/default/files/adsr_2017.pdf.

disasters made landfall, which resulted in a historic high of \$306 billion dollars in losses. Following this unprecedented disaster season, 2018 continued with higher than average disaster activity. The Federal Emergency Management Agency (FEMA) reported 124 disasters in 2018, continuing this uptick.⁵ The United States rates among the top 10 countries for disaster events.⁶ In sum, natural disasters inspire a mounting concern not only because of the frequency and costliness, but also for the situational vulnerabilities which can create a susceptibility to human trafficking activities.⁷

Likewise, human trafficking is a growing concern and the United Nations Office on Drug and Crime (UNODC) reports it affects every country in the world.⁸ Cultures, geographic location, and country stability can influence the opportunity for trafficking. Some countries are transit and destination points for the trafficked victims, whereas other countries are more prone to population victimization. Human trafficking has become a global market which exchange people as if they were goods. The International Labour Organization (ILO) estimates that human trafficking has an annual profit of over \$150 billion, which exceeds the annual net profits of Microsoft, Samsung, and Apple combined.⁹

Although natural disaster can create situational vulnerabilities for disaster survivors, the concern for human trafficking extends beyond those directly impacted by the disaster. Vulnerabilities for external population groups may arise as well. Labor trafficking is a significant concern during disaster response as rebuilding efforts demand increased resources for construction and labor positions. During catastrophic disaster events, the requests for work exceeds the supply of available workers to meet the demand. The Bureau

⁵ Federal Emergency Management Agency, “Disaster Declarations by Year,” accessed March 28, 2019, <https://www.fema.gov/disasters/year>.

⁶ Centre for Research on the Epidemiology of Disasters, “Natural Disasters in 2017,” 3.

⁷ United Nations Office on Drugs and Crime, *An Introduction to Human Trafficking: Vulnerability, Impact and Action* (New York: United Nations, 2008), 3, https://www.unodc.org/documents/human-trafficking/An_Introduction_to_Human_Trafficking_-_Background_Paper.pdf.

⁸ United Nations Office on Drugs and Crime, “Factsheet on Human Trafficking” (New York: United Nations Office on Drugs and Crime, 2010), https://www.unodc.org/documents/human-trafficking/UNVTF_fs_HT_EN.pdf.

⁹ The Human Trafficking Institute, *2018 Annual Report* (Fairfax, VA: The Human Trafficking Institute, 2018), <https://www.traffickinginstitute.org/wp-content/uploads/2019/07/HTI-10-AR2018-FNL-WEB.pdf>.

of Labor Statistics (BLS) reported over 227,000 unfilled construction jobs after Hurricane Harvey.¹⁰ Such need creates an ideal situation to recruit foreign guest workers seeking an opportunity to come to the United States on temporary work visas. Foreign guest workers may not speak English and enter the United States with a commitment to, and trust in the company that hired them. Traffickers posing as legitimate employers, can exploit these workers and enslave them because of their dependence on the employment offered.

Both human trafficking and natural disasters touch the United States in significant ways, and when these two realms collide, tragedy results. For example, labor trafficking characterized Hurricane Katrina in 2005. Labor traffickers exploited more than an estimated 3,700 workers from 10 different countries during response efforts for Hurricane Katrina.¹¹ The majority of these workers will not receive justice for the abuse they endured. This lack of justice is common as of the over 16 million cases of forced labor worldwide, only about 1000 of those cases have been prosecuted.¹² This example and many others show the need to further examine the mutual relationship between human trafficking and natural disasters, yet not much research has been done on how post-natural-disaster environments create opportunities for human trafficking actions.

B. RESEARCH QUESTION

How can a post-disaster environment contribute to the human trafficking problem?

C. LITERATURE REVIEW

Disaster response and human trafficking are two topics of significance in the United States. Both of these subjects have been studied by researchers, scholars, and an array of experts. Many authors have tackled these topics independently of one another; however, the literature on human trafficking in the aftermath of natural disasters, especially in the

¹⁰ Kristie De Pena, “Admitting Temporary Workers into the U.S. Will Speed up Disaster Recovery,” *The Hill*, March 3, 2018, <https://thehill.com/opinion/healthcare/377570-admitting-temporary-workers-into-the-us-will-speed-up-disaster-recovery>.

¹¹ Hepburn and Simon, *Human Trafficking Around the World*, 17.

¹² Human Rights First, “Human Trafficking by the Numbers” (New York: Human Rights First, January 7, 2017), 2, <https://www.humanrightsfirst.org/sites/default/files/TraffickingbytheNumbers.pdf>.

United States, is much more scarce. This synopsis focuses on the notable authors contributing to the understanding of each individual topic: human trafficking and natural disaster activity.

The foundation for the research, analysis, and findings outlined in this thesis are based on human trafficking and disaster activity consequences. This review begins by summarizing the extant research of scholars on the topic of human slavery. A review of current research on natural disaster activity and climate change follows this assessment. Ultimately, this research and literature displays the gap in scholarly data pertaining to trafficking activity occurring in a post-disaster environment.

1. Understanding Human Trafficking in the United States

People commonly misperceive human trafficking activities occur only in poverty-stricken countries or war-torn areas. Yet this epidemic involves all 50 states. Kevin Bales is an expert in the field of human trafficking and cofounder of Free the Slaves, the largest abolitionist organization in the world. In his book, *The Slave Next Door*, Bales points out that it is impossible to know the true number of trafficked victims in the United States because of the hidden nature of the crime.¹³ He provides a conservative estimate of at least 50,000 people enslaved in the United States today.¹⁴ The State Department estimates that on average, 16,000 people are trafficked into the country each year.¹⁵ Bales's book, *Blood and Earth*, illustrates the gravity of the problem, noting the world has more slaves than people in the state of California and collectively this slave population produces a similar economic output to Washington, DC.¹⁶ Laura Murphy, further illustrates this point in her book, *Survivors of Slavery*. She notes that global slavery represents a historic high with roughly 27 million trafficked victims throughout the world.¹⁷ Although the world

¹³ Kevin Bales and Ron Soodalter, *The Slave Next Door: Human Trafficking and Slavery in America Today* (Berkeley: University of California Press, 2009), 7.

¹⁴ Bales and Soodalter, 7.

¹⁵ Bales and Soodalter, 6.

¹⁶ Kevin Bales, *Blood and Earth* (New York: Spiegel and Grau, 2016), 10.

¹⁷ Laura T. Murphy, *Survivors of Slavery* (New York: Columbia University Press, 2014), 2.

population is larger now than any other time in history, contemporary slavery is illegal internationally and this practice should be in decline instead of at record-breaking highs.¹⁸

The pervasiveness of human trafficking is not debated; however, the understanding of the underlying problem has varying interpretations. Although activists such as Bales and Murphy see trafficking as a humanitarian struggle that needs to be eliminated, other scholars, such as Kamala Kempadoo, perceive the term human trafficking as a problem tied to a political agenda.¹⁹ Kempadoo believes trafficking narratives have been pushed to control immigration and transnational organized crime.²⁰ Her book, *Reconsidered: New Perspectives on Migration, Sex Work, and Human Rights* explains this concept extensively. Unlike other authors, Kempadoo believes the sex trade industry should be legalized and regulated in order to create a safer environment for those choosing work in this industry.²¹ Although her perspective on the underlying problem is different, she concurs with other subject matter experts who believe ultimately human trafficking violates human rights and well-being.

Beyond concerns for human safety, experts also see technology as a critical component to the human trafficking epidemic. Social networking and internet communication have become an equalizer, making an increasing number of people susceptible to coercion regardless of physical location. Traffickers can access young impressionable minds and those seeking new opportunities simply by connecting with them on social media or posting ads for opportunities on popular and trusted sites. Mark Latonero addresses this issue in his University of Southern California Research Series on Technology and Human Trafficking. Latonero demonstrates how the internet can be a recruitment tool with a unique ability to obtain the trust of men, women, and children in a

¹⁸ A. Yasmine Rassam, "International Law and Contemporary Forms of Slavery: An Economic and Social Rights-Based Approach," *Penn State International Law Review* 23, no. 4 (2005): 810, <https://elibrary.law.psu.edu/psilr/vol23/iss4/15/>.

¹⁹ Kamala Kempadoo, Jyoti Sanghera, and Bandana Pattanaik, *Trafficking and Prostitution Reconsidered: New Perspectives on Migration, Sex Work, and Human Rights*, 2nd ed. (New York: Routledge, 2016), vii.

²⁰ Kempadoo, Sanghera, and Pattanaik, ix.

²¹ Kempadoo, Sanghera, and Pattanaik, ix.

way that could not be obtained as easily with face-to-face or oral communications.²² He further explains how pimps and madams use their personal accounts on social media sites, such as Facebook, to build relationships and recruit new members. Jennifer Musto, a researcher and scholar at Wellesley College, also sees how this ease of access to potential victims presents a paradoxical issue.²³ She explains how internet sites utilized by traffickers for the recruitment of victims can also be platforms for awareness and prevention.²⁴ Musto recognizes technology as a tool for mediating trafficking activity, but it also can blur the lines between sex trafficking and sex trade which aligns with Kempadoo's perspective.²⁵ Ultimately, the internet is a blessing and a curse because it can not only create trafficking opportunities but also serve as an incredible anti-trafficking tool.

Another group of scholars exposes the psychological effects of human trafficking. Bozidar Banovic, Professor of Security Studies and researcher at the University of Belgrade, and Zeljko Bjelajac, Professor of Economics and Justice at the University Economics Academy in Serbia, have researched the impact of human trafficking on mental health in their article, "Traumatic Experiences, Psychophysical Consequences and Needs of Human Trafficking Victims." Specifically, the authors note that victims tend to suffer from Post-Traumatic Stress Disorder (PTSD), depression, adjustment disorder, and self-harm.²⁶ Self-harm, for example, takes the form of self-hitting, cutting, or self-inflicted burns. This behavior occurs as a self-protection method to help victims avoid painful and unwanted memories. Banovic and Bjelajac describe this as split consciousness.²⁷ They further express how critical it is for victims to receive institutional support and counseling

²² Mark Latonero, *Human Trafficking Online: The Role of Social Networking Sites and Online Classifieds* (Los Angeles: University of Southern California, 2011), 14, https://technologyandtrafficking.usc.edu/files/2011/09/HumanTrafficking_FINAL.pdf.

²³ Jennifer Lynne Musto and Danah Boyd, "The Trafficking-Technology Nexus," *Social Politics: International Studies in Gender, State and Society* 21, no. 3 (Fall 2014): 467, <http://muse.jhu.edu/article/555446>.

²⁴ Musto and Boyd, 467.

²⁵ Musto and Boyd, 464.

²⁶ Bozidar Banovic and Zeljko Bjelajac, "Traumatic Experiences, Psychophysical Consequences and Needs of Human Trafficking Victims," *Vojnosanitetski Pregled* 69, no. 1 (2012): 95, <https://doi.org/10.2298/VSP1201094B>.

²⁷ Banovic and Bjelajac, 95.

for this type of behavior. They suggest that reintegrating victims into society requires specialized state and non-profit programs specifically focused on the complex needs of trafficked victims.²⁸

Rachel Lloyd, a human trafficking survivor and leading advocate in the effort to improve legislation to help trafficking victims, also details the psychological consequences of trafficking in her book, *Girls Like Us*. She explains how traumatic responses vary and while some victims are filled with rage, others have numbed and buried their feelings.²⁹ These various emotional responses manifest in different ways. She estimates over half of trafficking victims in the sex trade suffer from PTSD, while others suffer from Stockholm syndrome.³⁰ Stockholm syndrome causes victims to form a psychological alliance with their pimp. This condition results in victim relapses as victims may convince themselves the abuse was not that bad and that this time things will be different.³¹ Lloyd further explains that victims yearn for the relationship with their pimp, but not the abuse.³² In many cases, the victim has misguided views of affection, and the feelings of love for their pimp do not instantly cease, especially for younger victims whose pimps fill a paternal role.³³

Similar to Banovic and Bjelajac, Lloyd feels the healing process is complex and requires professional help before a victim can return to a normal life.³⁴ Lloyd illustrates the extreme emotional levels of trafficking as going from a world that is in technicolor, as the trafficking life is dramatic and filled with extreme emotions, to a world that is in black and white, as normal life is much more mundane and neutral.³⁵ This emotional shift coupled with the realities of supporting yourself and navigating the responsibilities of life

²⁸ Banovic and Bjelajac, 95.

²⁹ Rachel Lloyd, *Girls Like Us* (New York: HarperCollins, 2011), 180.

³⁰ Lloyd, 180.

³¹ Lloyd, 188.

³² Lloyd, 188.

³³ Lloyd, 188.

³⁴ Lloyd, 193.

³⁵ Lloyd, 181.

may be too much. Lloyd further brings understanding by explaining how the human body has a defense mechanism which removes the feeling of pain from memory.³⁶ Unfortunately this natural defense may cause the victim to put themselves right back in harm's way.

The crime of trafficking commonly goes unpunished. Jennifer Chacon, an immigration law expert at the University of California, Los Angeles, explains that laws such as the Victims of Trafficking and Violence Protection Act (TVPA) intend to offer statutory protection to victims and increased criminal punishments for traffickers, but these laws fall short in producing results.³⁷ Chacon explains why there is widespread criticism for the failure to combat and prosecute trafficking in the United States. She argues this is due to the law enforcement goals outlined in the TVPA undermining the humanitarian initiatives to assist victims.³⁸ She argues that the legal barriers present road blocks for refuge and relief to victims. Proving Chacon's point, Kevin Bales shares the sad reality that the U.S. government estimates only 1 percent of human trafficking cases are ever solved.³⁹

2. A Rise in Natural Disaster Frequency

Natural disaster activity has been increasing over the last decade in the United States and throughout the world. In 2017, the United States faced an unprecedented series of major storms and natural disasters. Hurricanes Harvey, Maria, and Irma, caused catastrophic damage and represented only a small portion of the significant natural events seen that year. The U.S. Global Change Research Program outlined in their 2018 Climate Assessment the global rise of temperatures. This report's findings show that climate change has caused more frequent and intense weather activity.⁴⁰ The report concludes that

³⁶ Lloyd, 188.

³⁷ Jennifer M. Chacon, "Misery and Myopia: Understanding the Failures of U.S. Efforts to Stop Human Trafficking," *Fordham Law Review* 74, no. 6 (2006): 2978, <http://ir.lawnet.fordham.edu/flr/vol74/iss6/3>.

³⁸ Chacon, 2978–79.

³⁹ Bales and Soodalter, *The Slave Next Door*, 7.

⁴⁰ David Reidmiller et al., *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* (Washington, DC: U.S. Global Change Research Program, 2018), 25, https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf.

evidence shows this pattern will undoubtedly continue. Jane A. Bullock and George Haddow further emphasize this likelihood in their research. They argue that the significant increase in disasters is already happening. Throughout the 1990s, the number of natural disasters averaged around 200, and since 2006 the average has doubled.⁴¹ Bullock and Haddow further predict that even if the emission of all greenhouse gases ceased, the effects of previously released gases are irreversible and will continue to cause the planet to get warmer.⁴² They conclude natural disaster activity will continue to rise especially in areas that are already prone to disasters, such as the United States.⁴³

Michael B. Gerrard, an expert on environmental law and climate change law at Columbia Law School, contributed to this topic by looking into the future. Gerrard illustrates how by 2100, the global temperature could increase from 2.6°C to 3.1°C.⁴⁴ If this were to happen, the results would be catastrophic. Gerrard explains one consequence of global warming would be major ice sheets melting in Antarctica and Greenland.⁴⁵ He further explains how island nations would go underwater and major coastal cities would be severely impacted with flooding caused by significant temperature increase.

This research helps bring into focus why natural disasters will continue to be a growing concern for this country and the planet. Gerrard also notes that the International Criminal Police Organization (INTERPOL) warned that disasters expose populations to trafficking due to sudden disruption and loss.⁴⁶ This warning supports the idea of a correlation between disaster activity and human trafficking activity and if disaster activity rises, this paves the way for increased human trafficking opportunities.

⁴¹ Jane Bullock, George Haddow, and Kim Haddow, *Global Warming, Natural Hazards, and Emergency Management* (Boca Raton, FL: CRC Press, 2008), 7.

⁴² Bullock, Haddow, and Haddow, 6.

⁴³ Bullock, Haddow, and Haddow, 6.

⁴⁴ Michael B. Gerrard, "Climate Change and Human Trafficking after the Paris Agreement," *University of Miami Law Review* 72 (March 9, 2018): 354, <https://repository.law.miami.edu/cgi/viewcontent.cgi?article=4527&context=umlr>.

⁴⁵ Gerrard, 355.

⁴⁶ Gerrard, 358.

3. Human Trafficking During Post-Disaster Response

This literature review outlines the complexities of human trafficking and the concern for increases in natural disasters. However, the literature analyzing the relationship and common factors of these two topics represents a gap. Since the largest trafficking case in U.S. history directly tied to activities after a natural disaster event, it suggests the need for more research. In fact, research found that roughly 3,750 people were victims of human trafficking following Hurricane Katrina alone.⁴⁷ This evidence points to a relationship between natural disasters and human trafficking activity.

This evaluation of current literature demonstrates the need for more research and analysis of human trafficking activity after natural disasters to combat trafficking actions within the United States. The end goal of this research is to further the mission to protect disaster survivors and disaster workers in the aftermath of a natural disasters. The intent is to provide a significant contribution to the Homeland Security mission of combatting human trafficking.

D. RESEARCH DESIGN

This section provides the overall strategy of this research. The design integrates multiple components including: the objective, focus, scope, instrumentation, analysis approach, and limiting factors.

1. Object of Study

The primary objective of this thesis is to establish a causal relationship between natural disaster environments and human trafficking. This research intends to seek ways to improve and protect communities and workers during disaster response and recovery. This research will provide recommendations to combat trafficking after a natural disaster. The focal point of this research is to bring awareness to human trafficking activity occurring after natural disasters in the United States and elsewhere in the world, to reduce the gap in literature on this topic.

⁴⁷ Muangmol Asanok et al. vs. Million Express Manpower Inc., No. 5:07-CV-48 BO (District Court for the Eastern District of North Carolina, Western Division, October 24, 2009).

2. Selection Criteria

The focus of this research targets victims of human trafficking who were specifically coerced in the aftermath of a disaster. The TVPA defines human trafficking or the term “severe forms of trafficking in persons” as:

(A) sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or

(B) the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.⁴⁸

This definition applies to both sex trafficking and labor trafficking victims. In this research, the common group coerced into sex trafficking are disaster victims, whereas, labor trafficking victims are foreign guest workers or undocumented immigrants in the disaster area who are employed to meet the demand for construction and rebuilding efforts.

3. Scope

This research will concentrate on identifying mutual factors connected to post-natural-disaster environments and causes of human trafficking. This narrow scope is intentional in order to provide resolutions to this specific aspect of human trafficking. While this research is applicable to human trafficking activities on a global scale, the ultimate goal of this research is to provide recommendations specifically related to policies and protections in the United States.

4. Instrumentation

The data collection for this analysis relies on multiple sources and includes varying media types such as journal articles, published reports, federal databases, litigation, and federal law. Secondary sources include articles, books, and media. This research analyzes environmental and disaster response vulnerabilities to better understand how these specific

⁴⁸ “Victims of Trafficking and Violence Protection Act of 2000,” Pub. L. No. 106–386, U.S. Statutes at Large 114 (2000), 1470, <https://www.congress.gov/bill/106th-congress/house-bill/3244/text>.

conditions promote trafficking. This analysis includes social, economic, and physical factors that increase vulnerabilities to human trafficking. A focal point in this evaluation is to develop a methodology by examining disaster and human trafficking cases. This methodology will then be evaluated by known trafficking cases that occurred after a natural disaster.

5. Steps of Analysis

This research employs a multi-component qualitative inquiry with a three-step approach. The first step analyzes both subjects, natural disasters and human trafficking, independently while also identifying common theoretical factors prevalent in both areas. These theoretical factors assist in developing a model illustrating the correlation. The second step entails identifying existing human trafficking case studies that prove the theoretical framework developed previously.

The research analysis aspires to gain a better understanding of how traffickers coerce victims after natural disasters. Hopefully, such insights inform recommendations to policy-makers to combat human trafficking in this country. This research provide a comprehensive evaluation of why human trafficking occurs in a post-disaster setting.

6. Limitations

Judicial processing serves as a limiting factor in this research because of scarce access to prosecuted cases associated with human trafficking and natural disasters. For example, the legal process for prosecuting trafficking cases from Hurricane Katrina took roughly a decade. Since it can take several years to prosecute cases, the availability of current case material is limited. In addition, if the victim is a minor, case data is unavailable.

A second limiting factor is the lack of data surrounding trafficking crimes and the lack of available documentation and reports due to the secretive nature of the crime. However, an increasing amount of data from the Trafficking Hotline and other non-profit organizations are bringing awareness and visibility to the frequency of trafficking activities which helps negates this limiting factor.

7. Output

This research sets out to bring awareness to this subject matter and begin the discussion on this serious issue. A desired output would be to assist in the effort to reduce human trafficking in the United States. This research concludes with findings and recommendations to federal leadership to promote positive change in the effort to combat human trafficking specifically in the aftermath of a natural disaster. Ultimately, the hope of this research is to influence actions that better protect citizens and workers during post-disaster response.

E. CHAPTER OUTLINE

I. Introduction

- A. Problem Statement
- B. Research Question
- C. Literature Review
- D. Research Design
- E. Chapter Outline

II. Theoretical Evaluation

- A. Effects of Natural Disasters
 - 1. Economic
 - 2. Social
 - 3. Human Security
- B. Causes of Human Trafficking
 - 1. Economic
 - 2. Social
 - 3. Human Security
- C. Conclusion

III. Verifying the Theory: Case Studies of Human Trafficking in Post-Natural-Disaster Environments

- A. Hurricane Katrina
 - 1. Signal International Case
 - 2. Audubon Communities Management Case
 - 3. Million Express Manpower Case

- B. Boxing Day Tsunami and the Gorkha Earthquake
 - 1. Boxing Day Tsunami
 - 2. Nepal Gorkha Earthquake
 - C. Methodology Application
 - 1. Economic Impact
 - 2. Social Impact
 - 3. Human Security Impact
 - D. Conclusion
- IV. Conclusions and Recommendations
- A. Findings
 - B. Recommendations
 - 1. Increase Awareness and Implement Education Initiatives
 - 2. Improve Current Legislation
 - C. Need for Further Research

II. THEORETICAL EVALUATION

Modern-day slavery, also known as human trafficking, represents a humanitarian crime difficult to combat because of its secrecy. Human trafficking, as with many illegal activities, can adapt quickly to a changing environment and flourishes in settings of social crisis and corruption.⁴⁹ U.S. natural disasters continue to create social and situational crises that create vulnerabilities and susceptibility that directly link to human trafficking activity. This chapter provides a theoretical evaluation of effects of natural disasters and causes of human trafficking, in search of a causal relationship between natural disasters and human trafficking.

A. EFFECTS OF NATURAL DISASTERS

Natural disasters produce several socioeconomic and political effects. In turn, these effects produce short-term and long-term consequences for the local population, the state, and in some cases the entire country. Natural disasters can completely disrupt the lives of large populations in a very short period. For example, earthquakes can occur in a matter of seconds and completely destroy buildings and other infrastructure while causing a mass casualty event. Although each disaster type has unique variables, three consistent effects follow a disaster: economic impact, social consequences, and the disruption of human security element.

1. Economic

Maslow's Hierarchy of Needs describes how a person must have their vital survival needs met before focusing on anything else.⁵⁰ Essentials such as food, water, sleep, and shelter, are critical for survival and take priority over other needs.⁵¹ Natural disasters such as hurricanes, earthquakes, flooding, tornadoes, and fires cause a sudden instability and

⁴⁹ Kevin Bales, "Expendable People: Slavery in the Age of Globalization," *Journal of International Affairs* 53, no. 2 (Spring 2000): 463, <https://www.jstor.org/stable/24357761>.

⁵⁰ Abraham H. Maslow, *A Theory of Human Motivation* (New York: Start Publishing LLC, 2013), 7.

⁵¹ Maslow, 7.

hamper individuals and communities from meeting basic needs as disasters can quickly destroy houses, businesses, and utility services. Tornadoes for example, provide little notice and can destroy entire neighborhoods within minutes, while hurricanes can impact multiple states in just a matter of days. Such disruptions create a multi-tiered economic consequence because of the effort needed to restore disaster survivors' basic needs. The tiers impacted include individual survivors, local businesses, and the national economy.

Individual disaster survivors typically suffer the worst economic consequences of a disaster; people in the communities affected by natural disasters may experience unexpected financial hardship, loss of employment, and disruption in community services. Consequently, it may take a lifetime for communities to recover from a disaster, and in some cases, communities never return to their previous form. A telling example is the 1991 firestorm in the Oakland Hills community, a wealthy area near San Francisco, California which killed 25 people and destroyed thousands of homes, turning an entire community of financially sound homeowners into homeless people.⁵²

Furthermore, many of the lots were eroded from the fire department's water response.⁵³ In some cases, the erosion was so bad that rebuilding was not an option and the lots became valueless. Several homes had outdated insurance policies that had not been updated in 10 years.⁵⁴ Homeowners thought renewing their policy sufficed, unaware that this coverage was insufficient. Since the building codes for the homes were also out of date, some could not afford to rebuild because new regulations and seismic codes added to the reconstruction costs.⁵⁵ For example, a homeowner who had proactively purchased a \$100,000 fire insurance policy, based on the original purchase price, found the rebuild cost after the disaster would be over \$200,000.⁵⁶ In one day, residents of an upper-middle-class community were now homeless and in financial hardship.

⁵² Edwards, "Homes Wiped Away by Natural Disasters," 32.

⁵³ Edwards, 32.

⁵⁴ Edwards, 32.

⁵⁵ Edwards, 32.

⁵⁶ Edwards, 32.

Another example of how homeowners tackled unique challenges following a disaster would be the catastrophic storm, Hurricane Katrina which struck Louisiana in 2005. After this disaster, people became instantly homeless with little potential to rebuild. In the state of Louisiana, homeowners do not have to pay a tax bill unless their home is valued over \$75,000.⁵⁷ In one of Hurricane Katrina's most devastated areas, the Lower Ninth Ward of New Orleans, most residents fell into this tax category. Many homes in this area had been in the same families for generations, and ownership was often passed informally from one member to another.⁵⁸ Therefore, residents did not have deeds or tax bills to prove ownership of the property, which made it nearly impossible to secure financial assistance to rebuild. In addition, the income of the residents was so low, that the residents did not qualify for loans to repair. Those who overcame these hurdles and acquired funding to rebuild, faced mitigation requirements issued by FEMA which included regulations like raising the home 10 to 20 feet above ground level to prevent future flooding.⁵⁹ In some areas of the Lower Ninth Ward, the cost to build a home this high off the ground prevented any hope of reconstruction.

Complexities such as those mentioned in both the California and the Louisiana examples explain why people become unexpectedly homeless. These two examples alone span multiple economic levels. Beyond impacting property owners, natural disasters create other economic consequences that affect individual survivors: environmental factors can spread disease leading to health concerns and other problems that strike individuals out of work or cause businesses to shut down triggering unemployment. Poor air quality, as well as limited electricity, access to healthcare services, potable water, and functioning latrines, add to these challenging effects of natural disasters.⁶⁰

Illustrative examples are Cyclone Kenneth and Cyclone Idai, which struck Mozambique in 2019. These two storms caused hundreds of thousands of people to be

⁵⁷ Edwards, 33.

⁵⁸ Edwards, 33.

⁵⁹ Edwards, 33.

⁶⁰ John T. Watson, Michelle Gayer, and Maire A. Connolly, "Epidemics after Natural Disasters," *Emerging Infectious Diseases* 13, no. 1 (January 2007): 3, <https://doi.org/10.3201/eid1301.060779>.

displaced and virtually destroyed the entire sanitation system in Mozambique including sewers, proper drainage, and bathrooms.⁶¹ The storms also disrupted the current immunization annual plan to contain the waterborne disease, cholera, resulting in an outbreak in which an estimated 6,768 suspected cases and eight deaths were reported.⁶² Thus, the economic consequences can be complex for individual disaster survivors beyond disruptions in employment.

Disasters leave long-lasting impacts on small businesses and individuals at the local community level. The aftermath of the October 2012 Hurricane Sandy, which struck the entire eastern seaboard of the United States, from Florida to Maine, and ultimately impacted 24 states blatantly demonstrated this effect. Twenty-one states suffered electrical outages in the aftermath of Hurricane Sandy, affecting more than 8.5 million people.⁶³ In addition to power, many saw outages for internet and cellular service. Research conducted by The Hartford Financial Services Group found that local businesses throughout states in the northeast were significantly impacted by consequential environmental factors from Hurricane Sandy.⁶⁴ The Hartford study also found that approximately 71% of small to medium-size businesses lost power and 56% lost phone and internet connectivity. The loss of electrical, phone, and internet resources affected revenue and forced many companies to close after the storm.⁶⁵

In addition to the power loss, water pollution followed Hurricane Sandy. For example, not only did water but also raw sewage invaded homes when the power outage rendered a sewage plant incapable of operating.⁶⁶ The state of New Jersey had to issue

⁶¹ Edgar Cambaza et al., “Outbreak of Cholera Due to Cyclone Kenneth in Northern Mozambique,” *International Journal of Environmental Research and Public Health* 16, no. 16 (2019): 2925, <https://doi.org/10.3390/ijerph16162925>.

⁶² Cambaza et al., 2925.

⁶³ John Manuel, “The Long Road to Recovery: Environmental Health Impacts of Hurricane Sandy,” *Environmental Health Perspectives* 121, no. 5 (May 2013): A154, <http://dx.doi.org/10.1289/ehp.121-a152>.

⁶⁴ David Mielach, “Small Businesses Still Suffering Hurricane Sandy Impact,” *Business News Daily*, January 23, 2019, <https://www.businessnewsdaily.com/4168-superstorm-sandy-small-business-impact.html>.

⁶⁵ Mielach.

⁶⁶ Manuel, “The Long Road to Recovery,” A157.

public advisories to boil drinking water in homes due to concerns of contamination in water supply systems.⁶⁷ It also issued advisories for public recreational waters with surging sewage. All these deleterious effects of Sandy had high economic impacts on businesses and individuals. Hurricane Sandy displaced 145,000 workers in one week.⁶⁸ Five months after the storm, 52% of small to medium-size businesses confirmed a loss in sales and revenue due to the storm.⁶⁹ Thus, the ripple effect from the hurricane such as water contamination, power loss, and disruptions in connectivity resulted in significant economic damages.

Finally, natural disasters result in negative economic consequences at the national level. As disaster activity continues to increase, it strains national resources in both the public and private sector which can create additional economic complexities.⁷⁰ The National Oceanic and Atmospheric Administration (NOAA) reported that 2019 marked the 5th consecutive year to see 10 or more separate natural disasters costing over \$1 billion in damage.⁷¹ Since 1980, the United States has sustained 254 disasters with damages above the \$1 billion mark.⁷² These 254 disasters alone have cost the United States over \$1.7 trillion. The United Nations Office for Disaster Risk Reduction (UNDRR) reports the United States as the second most impacted country for natural disasters.⁷³ Although a significant issue for this country, it is also a global economic problem. The UNDRR also reported that in 2017 alone, natural disasters displaced 23.9 million people and produced

⁶⁷ Manuel, A157.

⁶⁸ Claudia Hdz, "Hurricane Sandy Likely to Increase Unemployment Rate to 8.0% or 8.1%," *Bronars Economics* (blog), November 23, 2012, <https://sbronars.wordpress.com/tag/unemployment-rate-2/>.

⁶⁹ Mielach, "Small Businesses Still Suffering Hurricane Sandy Impact."

⁷⁰ National Centers for Environmental Information, "U.S. Billion-Dollar Weather and Climate Disasters: Overview," National Oceanic and Atmospheric Administration, 2020, <https://www.ncdc.noaa.gov/billions/>.

⁷¹ National Centers for Environmental Information.

⁷² National Centers for Environmental Information.

⁷³ United Nations Office for Disaster Risk Reduction, "Americas to Meet on Disaster Risk Reduction Following Heavy Economic Losses in 2017" (Geneva, Switzerland: United Nations Office for Disaster Risk Reduction, May 22, 2018), 1, https://reliefweb.int/sites/reliefweb.int/files/resources/2018_no10.pdf.

\$75 billion in economic losses globally.⁷⁴ This data highlights the significance disasters have on the national economy which ultimately produce losses that impact the local community level.

2. Social

Social inequality occurs from many civil rights inequities such as discrimination or segregation based on gender, race, economic status, and religion. For example, social inequality occurs if certain categories of the population cannot vote in elections because of gender, religion, or race. The UN divides social inequality into six primary categories: distribution of income, distribution of assets, distribution of employment, access to knowledge, access to social services, and political inequalities.⁷⁵

Of these, income, assets, and opportunities for work are considered the most important when evaluating social inequality.⁷⁶ The distribution of income is the most widely used metric for determining equality and inequality within a society simply because it is easy to measure. Assets include capital and physical assets such as land, homes, and buildings. Typically, if there is fair dispersion of income, positive assets will also be distributed. Regardless of a country's economic status, the UN views the availability of work and employment opportunities as a primary influence in social equality as it is an indicator of fair income distribution in the society.⁷⁷

The rise in income inequality continues unabated, representing its highest point in United States history.⁷⁸ For this reason, inequality has become a primary platform issue

⁷⁴ United Nations Office for Disaster Risk Reduction, *Global Assessment Report on Disaster Risk Reduction* (Geneva, Switzerland: United Nations, 2019), 262, https://gar.unisdr.org/sites/default/files/reports/2019-05/full_gar_report.pdf.

⁷⁵ United Nations Department of Economic and Social Affairs, *Social Justice in an Open World: The Role of the United Nations* (New York: United Nations, 2006), 17, <https://www.un.org/esa/socdev/documents/ifsd/SocialJustice.pdf>.

⁷⁶ United Nations Department of Economic and Social Affairs, 17.

⁷⁷ United Nations Department of Economic and Social Affairs, 17.

⁷⁸ Junia Howell and James R. Elliott, "Damages Done: The Longitudinal Impacts of Natural Hazards on Wealth Inequality in the United States," *Social Problems* 66, no. 3 (August 2019): 17, <https://doi.org/10.1093/socpro/spy016>.

for multiple candidates running in the 2020 presidential election. A recent study done through the University of Pittsburgh and Rice University evaluated how natural disasters contribute to wealth inequality in the United States.⁷⁹ The study assessed a nationally representative sample of nearly 3,500 families affected by natural disasters over the course of 14 years. The study found that as local disaster damage increased so did the inequality. It also found that regardless of damage level, wealth inequality increased when the amount of aid received from FEMA increased.

Beyond wealth inequality, the study also found inequalities with other social factors such as asset ownership, education, and race.⁸⁰ The model showed that white households tended to recover and gain wealth after a disaster, whereas black and Hispanic households lost wealth. Furthermore, households with more education and homeownership became more prosperous after a disaster. This study shows that a natural disaster exacerbates the social factors described by the UN, which widens the social inequality gap.

Natural disasters disrupt social norms and cause individuals sudden asset loss and possible unemployment which means income loss as well. Those impacted by the disaster who have insurance, disposable income, more assets, job security, and other social advantages may have more opportunities for help and support in a post-disaster circumstance. As with any aspect of life, greater access to resources means a greater ability to utilize those resources, which in turn may result in increased social inequality as some have to struggle more than others for assistance and recovery after a disaster.

3. Human Security

After a natural disaster, human security can become volatile as disasters can create unexpected extreme and far-reaching emergencies. The UN's 1994 Human Development Report redefined human security as the safety and well-being of individuals instead of the

⁷⁹ Howell and Elliott, 452. According to the authors: "The primary data for our analyses come from the restricted –access, geocoded Panel Study of Income Dynamics (PSID), which began tracking a representative sample of U.S. families in 1968."

⁸⁰ "Cyclone Idai – Events as They Happen," WHO in Emergencies, June 18, 2019, 464, <https://www.who.int/emergencies/cyclone-idai/events-as-they-happen>.

state's integrity.⁸¹ The literature reveals that catastrophic natural disasters result in serious concerns for the security and wellbeing of the people impacted by the disaster, such as, crises in the population which in turn may result in mass fear and even conflict.⁸² These after-effects in turn intensify any social and political instability already existing in that community.⁸³ If social issues and resource scarcity persist, conflict can result impacting the safety and security of the population.

The 2011 Tohoku earthquake and tsunami illustrates the human security concerns outlined by the UN. On March 11, 2011, the northeastern part of Japan felt the impact of an earthquake that had a 9.0 magnitude.⁸⁴ Within an hour, tsunami waves reaching 33 feet in height struck Japan flooding cities and causing further destruction. The disaster killed over 19,000 people, created billions of dollars in damages, and even produced a nuclear emergency.⁸⁵ Japan has experienced many earthquakes and tsunamis in its history, and has been touted as a world leader in disaster preparedness.⁸⁶ However, the state did not ever anticipate such a catastrophic event could occur. The Prime Minister of Japan at that time, Naoto Kan, publicly admitted that they were not prepared for a catastrophic event.⁸⁷

The Fukushima Dai-ichi nuclear plant was over 40 years old when this disaster struck Japan but was not prepared for such a catastrophic disaster.⁸⁸ The entire plant lost power and suffered significant damage including the loss of backup generators for power, resulting in multiple meltdowns and explosions.⁸⁹ The severity reached the highest level on the International Atomic Energy scale, which placed this accident on the same level as

⁸¹ United Nations Development Programme, *Human Development Report 1994*, 24.

⁸² United Nations Development Programme, 29.

⁸³ Rakhi Bhavnani, *Natural Disaster Conflicts* (Cambridge, MA: Harvard University, 2006), 2, <http://www.disasterdiplomacy.org/bhavnanisummary.pdf>.

⁸⁴ Rafferty and Pletcher, "Japan Earthquake and Tsunami of 2011."

⁸⁵ Rafferty and Pletcher.

⁸⁶ Hobson, *Rethinking Human Security after the 2011 Tohoku Earthquake*, 5.

⁸⁷ Hobson, 5.

⁸⁸ Hobson, 5.

⁸⁹ Rafferty and Pletcher, "Japan Earthquake and Tsunami of 2011."

Chernobyl.⁹⁰ This massive disaster created an extreme emergency which resulted in mass fear, destruction, and instability which the state was not prepared to endure, thus affecting the human security of the population.

Human security means people will have their basic needs met and live with a reasonable feeling of safety. A disaster such as this removes that security. In this example, radiation cleanup displaced approximately 154,000 people for years.⁹¹ Likewise, destruction of the plant wiped away economic security as many people relied on it for their livelihoods. Japan decommissioned this nuclear facility after the accident. Therefore, many businesses relocated and closed because of the fear of radiation. The public discovered that the government withheld critical information concerning the meltdown which left people distrustful of both the media and the government. These disaster after-effects reduced personal and community security.⁹² The disaster featured another category of human security, health security, because it was unclear what a safe level of radiation is, or whether one even exists.⁹³ This example shows how the disruption of these various forms of human security have immediate impacts on individuals and communities, as well as long-lasting effects.

B. CAUSES OF HUMAN TRAFFICKING

Human trafficking relies on the trafficker's ability to exploit vulnerabilities of individuals. This section demonstrates that circumstances including financial hardships, social disparities, and unfavorable environmental conditions cause these vulnerabilities. Traffickers prey on the weaknesses of individuals to coerce their victims into a trafficking scenario. The following section explores the primary factors which makes victims assailable.

⁹⁰ Rafferty and Pletcher.

⁹¹ Hobson, *Rethinking Human Security after the 2011 Tohoku Earthquake*, 6.

⁹² Hobson, 7.

⁹³ Hobson, 7.

1. Economic

Economic inequality is a primary cause of human trafficking.⁹⁴ Instability in the realm of society, as well as in the realm of the individual, can increase the susceptibility to human trafficking.⁹⁵ Indeed, those without economic security experience poverty and powerlessness.⁹⁶ Economic vulnerabilities create desperation among people and this individual or collective state of mind presents an opportunity for individual manipulation. A trafficker can use a simple art of persuasion tactic to coerce an economically desperate victim. The trafficker promises to meet the needs that the person is lacking while also promising to provide a better life than the current society is offering, which the economically affected person is willing to accept.

As mentioned previously, Maslow's hierarchy explains how individuals must meet their vital needs for survival. If a trafficking actor can convince a person his needs will be met, the person may oblige out of necessity. Lacking foundational needs impacts an individual's behavior and decision-making ability. A person who is hungry, for example, can be expected to relate all decisions to fulfilling the need to be fed.⁹⁷ Accepting servitude for survival becomes perfectly rational. An enslaver can prey upon these needs and overpower a victim; in turn the victim will continue the servitude for repayment of meeting the vital need.

Populations with low economic stability tend to be more susceptible to human trafficking. Studies have concluded that economics is a primary link between victim vulnerabilities and the human trafficking crime.⁹⁸ Characteristics such as high crime rates, governmental corruption, poor education opportunities, and high poverty rates, are

⁹⁴ John R. Barner, David Okech, and Meghan A. Camp, "Socio-Economic Inequality, Human Trafficking, and the Global Slave Trade," *Societies* 4, no. 2 (June 2014): 148, <https://doi.org/10.3390/soc4020148>.

⁹⁵ Kevin Bales, "What Predicts Human Trafficking?," *International Journal of Comparative and Applied Criminal Justice* 31, no. 2 (September 2007): 8, <https://doi.org/10.1080/01924036.2007.9678771>.

⁹⁶ Barner, Okech, and Camp, "Socio-Economic Inequality," 148.

⁹⁷ Maslow, *A Theory of Human Motivation*, 7.

⁹⁸ Edward J. Schauer and Elizabeth M. Wheaton, "Sex Trafficking into the United States: A Literature Review," *Criminal Justice Review* 31, no. 2 (June 2006): 161, <https://doi.org/10.1177/0734016806290136>.

common in communities with economic constraints. These characteristics are also commonly associated with communities penetrated with human trafficking activity.⁹⁹ In 2017, the U.S. Census estimated that 40 million people, or roughly 12.3 percent of the population in the United States, fell into the poverty category.¹⁰⁰ This segment represents a significant portion of the population susceptible to trafficking crimes.

More broadly, economic globalization is considered to be a growing factor that fosters human trafficking efforts.¹⁰¹ Globalization has created an integrated world economy that relies on interdependence among countries for the trading of goods and commodities.¹⁰² This economy exchanges goods, technology, and other human products around the world.¹⁰³ This legitimate trade parallels human trafficking as the exchange of humans for sex and labor have become commercialized. Globalization has been a key factor in trafficking actions as prostitution has become an international business for sexual exploitation.¹⁰⁴ For example, women are trafficked into Germany from impoverished countries such as Nigeria to work at legal brothels. These women are manipulated and deceived about the conditions of employment. Once in Germany, the women, who are overpowered by the trafficker, cannot escape their circumstance. Globalized exploitation can reach even further with the use of technology. It has been reported that virtual sexual

⁹⁹ Heather J. Clawson and Nicole Dutch, *Identifying Victims of Human Trafficking: Inherent Challenges and Promising Strategies from the Field* (Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, 2006), 2, <https://aspe.hhs.gov/system/files/pdf/75321/ib.pdf>.

¹⁰⁰ “Poverty Estimates, Trends, and Analysis,” Department of Health and Human Services, accessed July 27, 2019, <https://aspe.hhs.gov/poverty-estimates-trends-and-analysis>.

¹⁰¹ Devin Brewer, “Globalization and Human Trafficking,” in *Topical Research Digest: Human Rights and Human Trafficking*, ed. Arianna Nowakowski et al. (Denver: University of Denver, Josef Korbel School of International Studies, 2008), 46, <https://www.du.edu/korbel/hrhw/researchdigest/trafficking/index.html>.

¹⁰² Brewer, 47.

¹⁰³ Kevin Bales, *Understanding Global Slavery: A Reader* (Berkeley: University of California Press, 2005), 112, ProQuest.

¹⁰⁴ Ines Eisele, “Modern Slavery in Germany: Preying on the Vulnerable,” Deutsche Welle, August 23, 2018, <https://www.dw.com/en/modern-slavery-in-germany-preying-on-the-vulnerable/a-45197916>.

exploitation is occurring in Germany as well.¹⁰⁵ German customers can pay an hourly rate to have a child in the Philippines do whatever the customer demands in front of a webcam.

Modern slavery, then, is part of a bigger machine for economic prosperity. Kevin Bales illustrates another example where women captured in Burma were transported to brothels in Thailand, Japan and Europe.¹⁰⁶ Monies from Hong Kong fund the brothels in Thailand, and the European brothel is an investment for charcoal operations in Brazil. This example shows how globalization facilitates the exchange of slaves in the same manner as other goods. Non-state actors generated revenue from human slavery and the profits traverse international borders. Despite slavery being illegal globally, people continue to be tradable pawns for economic prosperity.

2. Social

Throughout human history, inequity in societies has been a consistent storyline. The wealthy and elite maintain power through social structures that allow an outcome of inequality.¹⁰⁷ As previously mentioned, income and asset distribution are important components in social equality. Resources must be properly dispersed and available to the population as a whole. Infrastructure, community services, education opportunities, health services, and employment rates are more accessible when there is prosperity in society.¹⁰⁸ If the public resource structure is not stable or limited, this could result in an unfair distribution of help with individuals on the higher rungs of the social ladder receiving priority.¹⁰⁹ These inequalities create an opportunity for human trafficking actors.

Traffickers understand these social challenges for individuals and seize upon them. A great example of this is South East Asia. An estimated 225,000 women and children are

¹⁰⁵ Eisele.

¹⁰⁶ Bales, *Understanding Global Slavery*, 79.

¹⁰⁷ Barner, Okech, and Camp, "Socio-Economic Inequality," 149.

¹⁰⁸ Barner, Okech, and Camp, 150.

¹⁰⁹ Robert R. Weaver and Robert Rivello, "The Distribution of Mortality in the United States: The Effects of Income (Inequality), Social Capital, and Race," *OMEGA - Journal of Death and Dying* 54, no. 1 (February 2007): 20, <https://doi.org/10.2190/C772-U444-8J65-2503>.

trafficked from this region annually or roughly one-third of the human trafficking population.¹¹⁰ In 2013, Kelsey McGregor Perry, a researcher at the University of California, led a study conducted by five independent researchers to determine whether social determinants facilitate trafficking actions. The research found that over 92% of survivors reported social causes were directly associated with their trafficking victimization.¹¹¹ The study found the interconnection of social elements including poverty, gender, education, and age.

Social instability causes many problems for individuals and the community. Throughout the world, social inequalities from the aforementioned factors lead to violence, victimization, poor mental health, homelessness, high rates of drug addiction, and increased illness.¹¹² Those experiencing social inequality tend to have low social capital and are more liable to make poor life choices.¹¹³ One poor life choice could result in human trafficking. The need for migration as a result of poverty or limited employment opportunities could create greater susceptibility to making poor choices. Trafficked persons may be willing to migrate to another country or region to follow an employer with the promise of work; others may receive an advance in salary that results in debt bondage, while another common scenario is parents or family members selling children to traffickers.¹¹⁴

Social inequality is a major contributor to human trafficking throughout the world. Human trafficking is a crime against the social fabric of humanity. This crime thrives off social inequality and many Americans are vulnerable due to social inequality. For example,

¹¹⁰ Kelsey McGregor Perry and Lindsay McEwing, "How Do Social Determinants Affect Human Trafficking in Southeast Asia, and What Can We Do About It? A Systematic Review," *Health and Human Rights* 15, no. 2 (December 2013), <https://www.hhrjournal.org/2013/12/how-do-social-determinants-affect-human-trafficking-in-southeast-asia-and-what-can-we-do-about-it-a-systematic-review/>.

¹¹¹ Perry and McEwing.

¹¹² Barner, Okech, and Camp, "Socio-Economic Inequality," 149.

¹¹³ Weaver and Rivello, "The Distribution of Mortality in the United States," 21.

¹¹⁴ Heidi Box, "Human Trafficking and Minorities: Vulnerability Compounded by Discrimination," in *Topical Research Digest: Minority Rights*, ed. Arianna Nowakowski (Denver: University of Denver, Josef Korbel School of International Studies, 2011), 28, <https://www.du.edu/korbel/hrhw/researchdigest/minority/>.

estimates show roughly 750,000 U.S. citizens, and wealth inequality is very high.¹¹⁵ In 2007, the top 10% of households controlled 73.1% of the total wealth.¹¹⁶ These social factors demonstrate how social inequality can create vulnerabilities for citizens in the United States.

3. Human Security

When the UN shifted from the concept of nation-state security to people-focused security, it identified significant threats, such as drug trafficking, excessive international migration, and environmental degradation, all of which directly impact human security on the global level.¹¹⁷ All of the threats identified transcend borders and cultures. Each threat identified relates in some way to human trafficking. These threats are directly related to human trafficking activity or produce an environment that creates an opportunity for it.¹¹⁸

Human trafficking is one of the largest criminal industries in the world. According to the ILO, human trafficking as an industry produces \$150 billion dollars in profit yearly.¹¹⁹ The combined annual net profits of Microsoft, Wells Fargo, Samsung, JP Morgan, and Apple fall short of the annual revenue of human trafficking.¹²⁰ The power and wealth of this industry is why it is one of the greatest concerns for human security in the world. Powerful global organizations with business interests in multiple countries operate human trafficking.

¹¹⁵ “20 Facts About U.S. Inequality That Everyone Should Know,” Stanford Center on Poverty and Inequality, 2011, <https://inequality.stanford.edu/publications/20-facts-about-us-inequality-everyone-should-know>.

¹¹⁶ Stanford Center on Poverty and Inequality.

¹¹⁷ Roza Pati, “Human Trafficking: An Issue of Human and National Security,” *University of Miami National Security & Armed Conflict Law Review* 4, no. 2 (2013): 32, <http://repository.law.miami.edu/umnsac/vol4/iss2/5>.

¹¹⁸ Pati, 32.

¹¹⁹ “ILO Says Forced Labour Generates Annual Profits of US\$ 150 Billion,” International Labour Organization, May 20, 2014, http://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_243201/lang--en/index.htm.

¹²⁰ The Human Trafficking Institute, *2018 Annual Report*, 3.

Consider the example of the group Mara Salvatrucha, also known as MS-13. This group started as a street gang in Los Angeles, California and has been named by the Department of Treasury as a transnational criminal organization.¹²¹ Its criminal activity spans several countries including the United States, El Salvador, Guatemala, and Honduras. Human trafficking and people smuggling are central to its business model.¹²² In February of 2017, it was reported that three MS-13 gang members severely beat a 15-year-old sex trafficking victim in the Washington, DC area with a baseball bat because she was not performing well enough as an MS-13 prostitute.¹²³ One of the charged gang members, Miguel Angel Ayala-Rivera, who goes by the nickname, “Noctorno” is known for pimping out underage girls from multiple states. MS-13 victimizes young Latino girls who came into the United States as unaccompanied minors.¹²⁴ Once smuggled into the country, such girls become easy targets because they cannot speak the language, lack parental or community protection, and have no resources to support themselves.¹²⁵ This example exemplifies victims of human trafficking can be robbed of human security.

This example demonstrates how traffickers can take advantage of vulnerabilities at the core of human security. The UN cited drug smuggling and high rates of migration as significant threats to human security and MS-13 exemplifies how both drive human trafficking. This connection also reveals how human trafficking presents a negative consequence of globalization the flow of workers from countries who become ensnared in crime.

¹²¹ Andrew R. Arthur, “An MS-13 Horror Story That the Press Has Largely Ignored,” Center for Immigration Studies, February 21, 2018, <https://cis.org/Arthur/MS13-Horror-Story-Press-Has-Largely-Ignored>.

¹²² Pati, “Human Trafficking: An Issue of Human and National Security,” 40.

¹²³ Arthur, “An MS-13 Horror Story.”

¹²⁴ Andrew R. Arthur, “MS-13 and Sex Trafficking,” Center for Immigration Studies, February 22, 2018, <https://cis.org/Arthur/MS13-and-Sex-Trafficking>.

¹²⁵ Arthur.

C. CONCLUSION

The preceding discussion reveals that economic, social, and human security factors result from natural disasters and causes of human trafficking. Natural disaster environments create the key factors that lead to vulnerabilities exploited by human trafficking actors. This intersection supports a conceptual conclusion that natural disasters present opportunities for human trafficking. Described attributes such as poverty, social inequalities, and a breakdown in community safeguards become heightened issues after a natural disaster devastates an area, and these attributes are also common vulnerabilities that make people susceptible to human trafficking. The Venn Diagram in Figure 1 illustrates this intersection.

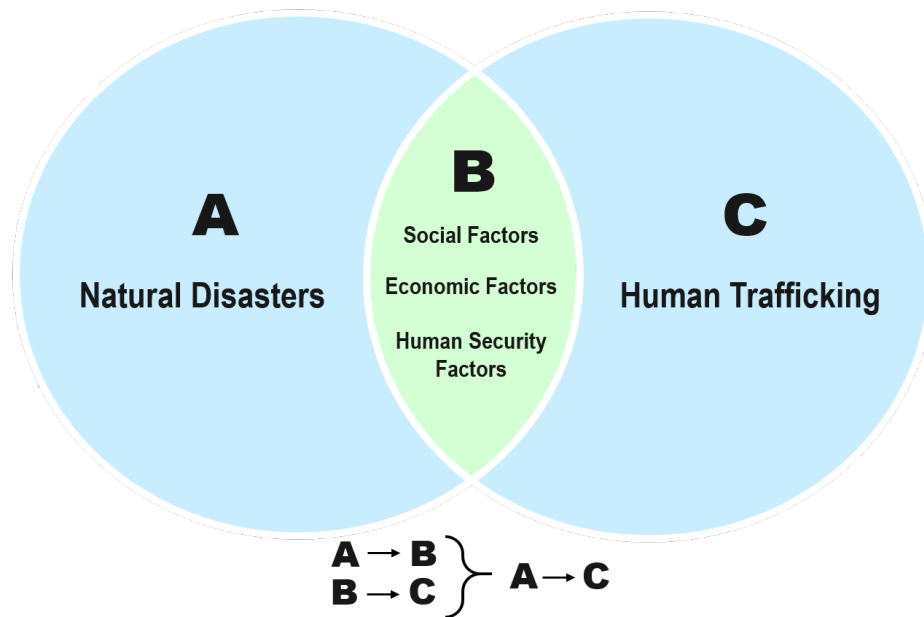


Figure 1. Factors Common to Natural Disaster Environments and Human Trafficking

Natural disasters create an abrupt change in the entire community structure which presents multiple opportunities for human trafficking. For instance, a sudden economic hardship caused by a natural disaster may lead someone to have poor judgment especially if this person is also dealing with personal tragedy or other consequences of the disaster. This situation could result in manipulation by a trafficking actor. If a person impacted by

the disaster were abruptly unemployed or if their home or other personal property were destroyed as a result of the disaster, a feeling of desperation might cause them to make poor decisions or trust a person who is taking advantage of their vulnerability.

Likewise, natural disasters expose and worsen social inequalities, burden individuals and resources within the community, while also disrupting the safety and security of the population and the environment. Disasters also provide fertile ground for the victimization of people beyond those directly impacted by the disaster. In the aftermath of a disaster, there is often a large demand for manual labor and low skill workers from outside of the community.¹²⁶ The internal resources are easily overwhelmed and the need for external support is prevalent. Traffickers can take advantage of this need by recruiting foreign guest workers to assist with the disaster response effort. The guest workers can easily be exploited as human security safeguards within the community are overwhelmed with supporting disaster recovery efforts.

Ultimately, the end conclusion is that the intersection of these common factors creates instability in the natural disaster environment which traffickers can exploit. To better understand this relationship, the next chapter will reveal documented cases of human trafficking that resulted from a natural disaster opportunity in Hurricane Katrina. These case studies illustrate how the common factors in this methodology are prevalent in the aftermath of a natural disaster and how traffickers expose the vulnerability.

¹²⁶ Stout, "Human Trafficking in the Wake of Natural Disasters," 7.

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III. VERIFYING THE THEORY: CASE STUDIES OF HUMAN TRAFFICKING IN POST-NATURAL-DISASTER ENVIRONMENTS

The chronic problem of underreporting and a misclassification of human trafficking cases makes it difficult to capture the full scale of human trafficking in the United States.¹²⁷ Polaris, the organization responsible for the U.S. National Human Trafficking Hotline, reports that only 1% of human trafficking cases are ever solved.¹²⁸ However, even with these data challenges, multiple examples illustrate the susceptibility to human trafficking for both disaster survivors and disaster workers in a post-disaster environment. Cases documented within the United States and around the world demonstrate the collision of human trafficking and natural disasters. The following disasters provide case studies in which human trafficking happened in the aftermath of the disaster: Hurricane Katrina, The Boxing Day Tsunami, and the Gorkha Earthquake. These cases help to explore the correlation among the factors outlined in this methodology with actual examples of human trafficking in the aftermath of a disaster.

A. HURRICANE KATRINA

Hurricane Katrina formed on August 23, 2005, as a tropical depression over the Bahamas. For the next few days the storm gained strength in the Atlantic and on August 27, the hurricane obliterated Louisiana and Mississippi. The Category 4 hurricane hit speeds as high as 120 miles per hour and reached a diameter that spanned the entire Gulf of Mexico.¹²⁹ This hurricane swept over 90,000 miles of land.¹³⁰ The city of New Orleans was one of the hardest hit locations. Most of this city is below sea level, and the city's levees were overwhelmed from the storm surge. This failure resulted in 20 percent of the

¹²⁷ Molly Callahan, "Human Trafficking in the U.S. Is a Much Bigger Problem Than We Think," *News@Northeastern*, August 16, 2019, <https://news.northeastern.edu/2019/08/16/human-trafficking-in-the-us-is-a-much-bigger-problem-than-we-think/>.

¹²⁸ Kevin Bales and Ron Soodalter, *The Slave Next Door: Human Trafficking and Slavery in America Today*, 2nd ed. (University of California Press, 2010), 7.

¹²⁹ Sarah Gibbens, "Hurricane Katrina, Explained," *National Geographic*, January 16, 2019, <https://www.nationalgeographic.com/environment/natural-disasters/reference/hurricane-katrina/>.

¹³⁰ Committee on Homeland Security and Governmental Affairs, *Hurricane Katrina*, 8.

city going underwater in one day.¹³¹ After the devastation of the disaster, the Superdome stadium served as a shelter for 30,000 displaced people, and another 25,000 stayed at the Convention Center. Food scarcity, looting, public health issues due to the bacteria-rich floodwaters, and many other problems arose in the aftermath of this hurricane.

Hurricane Katrina was one of the worst disasters in the history of the United States, causing the permanent displacement of roughly 400,000 people.¹³² The disaster cost over \$160 billion and reduced the population of New Orleans by 29% in roughly 5 years.¹³³ This catastrophic event challenged the United States from a disaster response perspective because of the historic devastation caused by this storm. On September 5, 2005, the Department of Labor (DOL) temporarily suspended health and job safety standards for counties in Louisiana that had been devastated by the hurricane.¹³⁴ Days later, the Department of Homeland Security (DHS) placed a 45-day suspension on requirements for worker eligibility and identity. Following this suspension, because of the national emergency and need for urgency, the President also suspended the Davis-Bacon Act, which ensures fair wages for repair workers on federal contracts.¹³⁵ All of these regulatory suspensions created an ideal situation for labor trafficking.

1. Signal International Case

The devastation of Hurricane Katrina presented some businesses with significant opportunity for profit. The need for construction, plumbing, electrical, and other industrial skills was at an all-time high, therefore overwhelming the local labor force's ability to meet the rebuilding demand. Thousands of workers flooded the area to assist with the massive

¹³¹ "Hurricane Katrina."

¹³² Gibbens, "Hurricane Katrina, Explained."

¹³³ "Hurricane Katrina."

¹³⁴ Hepburn and Simon, *Human Trafficking Around the World*, 19.

¹³⁵ Monica Guizar, "Disaster Contractors: Preventing Labor Trafficking and Protecting Workers in Post-Disaster Areas," in *Immigration and Human Trafficking* (ABA 12th Annual Section of Labor and Employment Law Conference, San Francisco, CA, 2018), 2, https://www.americanbar.org/content/dam/aba/events/labor_law/2018/AnnualConference/papers/ABA_Preventing_Labor_Trafficking_Protecting_Workers_Post_Disaster_Oct_2018_Guizar.pdf.

recovery effort, but the need was still too great.¹³⁶ This circumstance presented the opportunity to bring foreign guest workers to the United States on a temporary work visa to meet the large rebuilding need. Traffickers can readily exploit this type of need.

Indeed, in other countries, many people face social, economic, and security constraints because of unrest in their country or because of a lack of opportunities to advance their social system. For example, India has a social hierarchy caste system that segregates the higher most desired castes from those lower less desired castes. Today there are over 3,000 castes in India. One of the lowest castes, called the Dalits, has a population of about 200 million and are seen almost less than human as they have been referred to as the Untouchables.¹³⁷ Many people in this caste face social discrimination, debt bondage passed down from previous generations, and little opportunity for change. An estimated 40 million people are bonded laborers in India and this number includes an estimated 15 million children.¹³⁸ Significant social and economic hardships present a susceptibility to human trafficking.

After Hurricane Katrina, these susceptible people became targets during the post-disaster response. Signal International, a marine construction firm based in Mobile, Alabama recruited foreign guest workers from India, seeking over 500 pipefitters and welders interested in an opportunity to help rebuild after Hurricane Katrina. Workers were promised \$18 an hour, a green card, and ultimately an opportunity for permanent residence in the United States.¹³⁹ However, each worker had to pay up to \$20,000 for legal and brokering fees for this opportunity.¹⁴⁰ Rather than a green card, in reality such workers

¹³⁶ Blake Sisk and Carl L. Bankston III, "Hurricane Katrina, a Construction Boom, and a New Labor Force: Latino Immigrants and the New Orleans Construction Industry, 2000 and 2006–2010," *Population Research and Policy Review* 33, no. 3 (2014): 310, <http://dx.doi.org/10.1007/s11113-013-9311-8>.

¹³⁷ Jay Elwes and Alexander Brown, "How Does India's Caste System Work?," *Prospect Magazine*, November 13, 2014, <https://www.prospectmagazine.co.uk/magazine/how-does-indias-caste-system-work>.

¹³⁸ Smita Narula, *Broken People: Caste Violence against India's "Untouchables"* (New York: Human Rights Watch, 1999), 9, <https://www.hrw.org/reports/1999/india/index.htm#TopOfPage>.

¹³⁹ Noël Bridget Busch-Armendariz, Maura Nsonwu, and Laurie Cook Heffron, *Human Trafficking: Applying Research, Theory, and Case Studies* (Thousand Oaks, CA: SAGE Publications, 2017), 125.

¹⁴⁰ "SPLC Complaint in David v. Signal International, LLC," Signal International Lawsuits, March 10, 2008, <https://www.splcenter.org/seeking-justice/case-docket/signal-international-lawsuits>.

received a nine-month temporary guest worker credential for non-agricultural and non-skilled workers. The average Indian worker has an annual income of 80,000 rupees or \$1,127 annually in U.S. dollars, therefore taking this opportunity was a huge financial sacrifice for these men and a major commitment.¹⁴¹ These men borrowed from many and sold their prized possessions for this opportunity.

Once the recruited men arrived in the United States, their visas and passports were confiscated. The opportunity for prosperity had turned into a form of imprisonment. These men worked around the clock shifts and were treated as slaves. Signal forced up to 24 men to live together in small trailers in the company's shipyard and referred to this housing as 'man' camps.¹⁴² The men were coerced to sign a lease for an exorbitant monthly rent which was taken directly out of their pay.¹⁴³ The men felt imprisoned because of constant security guard surveillance and being frisked when entering their housing camps. These men were under constant stress and humiliation, while living under a continual threat of deportation.

On March 9, 2007, some of the workers decided to speak with workers' rights advocates. This action led Signal to have private security guards raid the labor camps which resulted in multiple workers being illegally detained for deportation. The psychological abuse and the fear of deportation, led one victim, Sabulal Vijayan, to be hospitalized after attempting suicide.¹⁴⁴ Other detained workers, Jacob Joseph Kadakkarappall, Thanasekar Chellappan, and Krishan Kumar, were held without food, water, or bathroom facilities for several hours after the raids.¹⁴⁵ Many of the other workers witnessed the events on March 9, but continued working because they were fearful, indebted, and felt isolated.

¹⁴¹ "India's Average Per Capita Income Higher in Last 4 Years at Rs 80,000," *Business Today*, August 8, 2018, <https://www.businesstoday.in/current/economy-politics/india-average-per-capita-income-higher-last-4-years-rs-80000/story/281142.html>.

¹⁴² Southern Poverty Law Center, "SPLC Complaint in David v. Signal International, LLC."

¹⁴³ Southern Poverty Law Center.

¹⁴⁴ Guizar, "Disaster Contractors," 11.

¹⁴⁵ Guizar, 12.

The Southern Poverty Law Center and other civil rights groups worked to bring these workers' cases to trial despite initial setbacks that did not allow them to file a class-action lawsuit.¹⁴⁶ The Crowell Moring law firm describes this case, which occurred in the aftermath of a disaster, as the “largest human trafficking case prosecuted in U.S. history.”¹⁴⁷ Attorney Dan Werner opined at the federal trial that the disregard for these guest workers' basic human rights was astounding.¹⁴⁸ After a 7 year legal battle, 5 of the victims were awarded \$14.1 million in damages.¹⁴⁹ Signal filed for Chapter 11 bankruptcy protection shortly after the ruling.¹⁵⁰

2. Audubon Communities Management Case

According to a study released by the University of California at Berkeley, thousands of temporary guest workers were in New Orleans for labor opportunities.¹⁵¹ The study showed 54 percent of those laborers were undocumented workers, which increased the chance for human trafficking as it is difficult for undocumented workers to find employment. This large percentage of undocumented laborers is a social issue that worsened after the natural disaster due to the great demand for low skill workers needed for rebuilding and recovery. Among those workers were approximately 50 undocumented Latino men who were hired through the Audubon Communities Management LLC to help restore a damaged complex in New Orleans.¹⁵²

¹⁴⁶ “David, ET AL. V. Signal International, LLC, ET AL.,” American Civil Liberties Union, May 29, 2013, <https://www.aclu.org/cases/david-et-al-v-signal-international-llc-et-al>.

¹⁴⁷ Chiemi Sukuki and Alan Howard, “Largest Human Trafficking Case in U.S. History,” Crowell & Moring Case Studies, accessed October 12, 2019, <https://www.crowell.com/Case-Studies/Crowell-Moring-Case-Study-David-v-Signal>.

¹⁴⁸ David v. Signal International, LLC, No. Civil Action Nos. 08–1220, 12–557, 13–6218, c/w No. 13–6219, No. 13–6220., 13–6221, 14–732 (Dist. Court July 11, 2014).

¹⁴⁹ Sukuki and Howard, “Largest Human Trafficking Case in U.S. History.”

¹⁵⁰ At the writing of this Thesis, January 2020, there is no available open-source information on the citizenship status of these victims or their current location.

¹⁵¹ Juliet Linderman, “Louisiana’s Human Trafficking Reports Increased in 2013, Study Says,” *Times-Picayune*, March 26, 2014, https://www.nola.com/news/crime_police/article_c81cbcf8-9289-54a1-8d59-ac09981826f0.html.

¹⁵² Guizar, “Disaster Contractors,” 8–9.

The men agreed to a contract with Audubon that consisted of duties such as painting, cleaning, wiring, and laying carpets. These men were promised employer-provided housing and at least \$500 a week in exchange for their labor.¹⁵³ The housing was in the storm-torn, mold-infested apartments that they were repairing. The workers were treated poorly and not compensated for their work. Some went 16 weeks without being paid.¹⁵⁴ The employer made alleged threats of eviction and deportation if they complained of non-payment.¹⁵⁵ Due to receiving no wages, the men had no money to purchase food which led them to search through the garbage for something to eat.¹⁵⁶ The workers were filled with shame and embarrassment but kept working because they were undocumented workers who faced constant threats of deportation from the company for non-compliance. The workers also feared losing their subpar housing, which would leave them homeless, if they were to quit working.

The Pro Bono Project of New Orleans became involved when 30 of these workers came to a weekly wage clinic.¹⁵⁷ They were able to work with officials to cease the trafficking operation and apply for U visas designed for immigrants who have been the victims of qualifying crimes including trafficking and involuntary servitude. A civil action granted some of these victims U visas in April of 2008.¹⁵⁸

3. Million Express Manpower Case

In 2005, 22 Thai national workers were recruited by Million Express Manpower, Inc. in Bangkok.¹⁵⁹ The victims were promised legal visas for work in the United States

¹⁵³ “Fred Garcia, Et Al. V. Audubon Communities Management, LLC, Et Al.,” Southern Poverty Law Center, March 17, 2008, <https://www.splcenter.org/seeking-justice/case-docket/fredi-garcia-et-al-v-audubon-communities-management-llc-et-al>.

¹⁵⁴ Guizar, “Disaster Contractors,” 8.

¹⁵⁵ “Fred Garcia, Et Al. V. Audubon Communities Management, LLC, Et Al.”

¹⁵⁶ Guizar, “Disaster Contractors,” 8.

¹⁵⁷ Guizar, 8.

¹⁵⁸ “Fred Garcia, Et Al. V. Audubon Communities Management, LLC, Et Al.”

¹⁵⁹ Hepburn and Simon, *Human Trafficking Around the World*, 17.

and a decent hourly wage. In return, they paid over \$11,000 in fees for the opportunity.¹⁶⁰ In hope of a better life in the United States, the workers put liens on their land and the land of family members to secure the money for the fees. These men had an income of less than \$500 a year, so this debt was significant.¹⁶¹

Once they arrived, armed guards working for Million Express Manpower confiscated their visas, passports, and tickets.¹⁶² Initially, the Thai national workers were located at a farm in North Carolina, but then transferred to New Orleans after Hurricane Katrina to perform demolition on storm-ravaged buildings. These workers were forced to live in damaged buildings containing mold and rubble where the general necessities of life such as clean water and electric were unavailable.¹⁶³ The basic necessities of life such as clean water, electric, and power were unavailable to these workers. The enslaved men could not seek basics elsewhere because armed guards hovered over them to ensure none escaped.¹⁶⁴ These men were not receiving pay in New Orleans and started to go hungry. As a result of living in destitution and desperation, the men built traps to capture pigeons to eat.¹⁶⁵

In 2009, a judgment in a North Carolina District Court ordered Million Express Manpower to pay back victims recruitment fees, unpaid wages and interest paid on the loans secured to pay the recruitment fees.¹⁶⁶ A common thread in all of these case studies is the use of citizenship, a fair wage, and opportunity to persuade vulnerable people. These companies preyed upon individuals who were already under hardship and presented a chance of a lifetime. In at least two of these labor trafficking cases, the victims were in the United States on legal immigrant worker visas.

¹⁶⁰ Hepburn and Simon, 18.

¹⁶¹ Hepburn and Simon, 18.

¹⁶² Hepburn and Simon, 18.

¹⁶³ Hepburn and Simon, 17.

¹⁶⁴ Hepburn and Simon, 17.

¹⁶⁵ Hepburn and Simon, 17.

¹⁶⁶ Muangmol Asanok et al. vs. Million Express Manpower Inc.

B. BOXING DAY TSUNAMI AND THE GORKHA EARTHQUAKE

Although sex and child trafficking cases are difficult to link to natural disasters because it is part of the victim's back story, many documented narratives have shown this connection. The 2019 Trafficking in Persons Annual Report, linked human trafficking to natural disasters in six different country narratives.¹⁶⁷ Although labor trafficking is primarily associated with foreign guest workers, disaster survivors fall victim to sex trafficking and child trafficking because of the factors already outlined. Disasters in Indonesia and Nepal exhibit this correlation.

1. Boxing Day Tsunami

On the morning after Christmas in 2004, a massive tsunami formed in the Indian Ocean as a consequence of a historic 9.1 undersea earthquake.¹⁶⁸ This tsunami, known as the Boxing Day Tsunami, impacted 13 countries and killed nearly 230,000 people in one of the deadliest disasters on record. Shortly after the tsunami, officials warned devastated communities to be cognizant of kidnappers and trafficking perpetrators, looking to take advantage of the poor economic conditions, social inequality, and precarious security of the Indonesians affected by the tsunami.¹⁶⁹

As predicted, soon after the waves struck, reports began to surface of children being taken by human traffickers in Indonesia. The International Organization for Migration (IOM), for example, reported seven known child trafficking cases within two weeks after the Boxing Day tsunami struck.¹⁷⁰ These cases were identified after reports revealed

¹⁶⁷ Department of State, *2019 Trafficking in Persons Report* (Washington, DC: Department of State, 2019), <https://www.state.gov/wp-content/uploads/2019/06/2019-Trafficking-in-Persons-Report.pdf>.

¹⁶⁸ Reid, "2004 Indian Ocean Tsunami: Facts, FAQs, and How to Help."

¹⁶⁹ Indeed, over 32 million people live in poverty in Indonesia. Social issues and inequality (including unequal access to free education due to poor living conditions, which in turn forces children to work or marry at a young age) are prevalent in Indonesia, and leaves Indonesian citizens—in particular children—susceptible to human trafficking. These inequalities were exacerbated by the Boxing Day tsunami post disaster consequences; for example, a child suddenly becoming an orphan, made it very easy for children to be taken by trafficking actors. See: Nexus Institute, "Human Trafficking in Indonesia: The Difficult Road Home," Nexus Institute, June 16, 2017, <https://nexusinstitute.net/2017/06/16/human-trafficking-in-indonesia-the-difficult-road-home/>.

¹⁷⁰ "UN Confirms Tsunami Child Trafficking Case," *The Age*, January 8, 2005, <https://www.theage.com.au/world/asia/un-confirms-tsunami-child-trafficking-case-20050108-gdzbu2.html>.

thousands of children were orphaned by the tsunami. In the first confirmed case, the United Nations Children's Fund (UNICEF) and the Indonesian police reported a case in Banda Aceh where a couple took a four-year-old boy by pretending to be his parents.¹⁷¹ Local police were contacted once the boy was taken to a Medan hospital, 280 miles from Banda Aceh, and local Non-Governmental Organizations (NGOs) became suspicious because inconsistencies in the couple's story led them to believe the boy was being trafficked.¹⁷² This case is especially significant because of the way this child was taken. Children can be easily coerced and trust strangers who seem to be helping them. If the child is suddenly orphaned after a disaster, traffickers can act quickly to manipulate and take children before authorities are aware of what has happened. The difficulty with disasters is bodies are not always located due to the nature of the disaster and can be presumed a fatality when in fact the person was abducted by a trafficker.

UNICEF also noted additional child trafficking reports such as a NGO report stating a worker saw a speed boat with about 100 infants leaving Banda Aceh in the middle of the night.¹⁷³ Fast forward one year after the tsunami, and the human trafficking victims identified by the Indonesian police reached 625 an increase of over 500% since before the tsunami in 2004, when only 103 victims were identified.¹⁷⁴ Officials admitted that child smuggling in Indonesia had been a concern before the tsunami because of the challenges faced in trying to pass substantial human trafficking laws.¹⁷⁵ This existing trafficking problem coupled with the chaos of the tsunami created conditions for a drastic increase in trafficking cases.

¹⁷¹ George Nishiyama, "Indonesia: UNICEF Confirms Tsunami Child Trafficking Case," ReliefWeb, January 7, 2005, <https://reliefweb.int/report/indonesia/indonesia-unicef-confirms-tsunami-child-trafficking-case>.

¹⁷² The Age, "UN Confirms Tsunami Child Trafficking Case."

¹⁷³ Nishiyama, "Indonesia."

¹⁷⁴ Stout, "Human Trafficking in the Wake of Natural Disasters."

¹⁷⁵ Nishiyama, "Indonesia."

2. Nepal Gorkha Earthquake

On April 25, 2015, the Gorkha earthquake struck Nepal with a magnitude of 7.8 and was followed by a 7.3 aftershock.¹⁷⁶ This earthquake claimed the lives of 9,000 people while injuring thousands. It created mass devastation and over 600,000 buildings were destroyed or significantly damaged after the earthquake. Anti-trafficking advocates were already concerned about the increased vulnerability of young girls who could be abducted by traffickers, but soon realized the earthquake created a new target for exploitation, parents whose livelihood was eliminated by the disaster.¹⁷⁷ These parents were more susceptible to be coerced by trafficking promising a better life for their children.

Less than two months after the earthquake, UNICEF reported saving at least 245 children who were being trafficked through illegal operations after the earthquake.¹⁷⁸ These nefarious operations were possible due to the poor social and economic conditions coupled with deficient security practices. One target area for poor security is the border between Nepal and India, which allows Indian nationals free movement between the two countries, and does not require a visa or passport.¹⁷⁹ It was reported that over 100,000 Indian nationals fled Nepal after the earthquake, making the Indo-Nepal border an increasingly vulnerable point for trafficking.¹⁸⁰ The border between India and Nepal is over a thousand miles long and has minimum patrolling, which provides a grand opportunity for traffickers to exploit those desperately crossing the border.¹⁸¹

¹⁷⁶ Danielle Torrent Tucker, “2015 Nepal Earthquake Offers Clues about Hazards,” *Stanford Earth Matters*, June 26, 2019, <https://earth.stanford.edu/news/2015-nepal-earthquake-offers-clues-about-hazards>.

¹⁷⁷ Jason Burke and Manoj Chaurasia, “India Rescues Children from Traffickers Exploiting Nepal Earthquake Aftermath,” *The Guardian*, May 25, 2015, <https://www.theguardian.com/world/2015/may/25/india-rescues-children-traffickers-exploiting-nepal-earthquake-aftermath>.

¹⁷⁸ “Nepal Earthquakes: UNICEF Speeds up Response to Prevent Child Trafficking,” UNICEF Press Centre, June 19, 2015, https://www.unicef.org/media/media_82328.html.

¹⁷⁹ “Arrival/Departure Information,” Nepal Department of Immigration, accessed January 19, 2020, <http://www.nepalimmigration.gov.np/page/arrival-departure-information-1>.

¹⁸⁰ Burke and Chaurasia, “India Rescues Children from Traffickers.”

¹⁸¹ Burke and Chaurasia.

Shortly after the earthquake, 26 children were abducted in a border crossing scandal.¹⁸² Traffickers quickly realized they could manipulate disaster survivors who had lost everything and returning from Nepal to their villages in India. At the Raxual border post, traffickers approached desperate migrating families with false promises and stories of better opportunity for their children. Some parents believed the traffickers' inflated promises and turned over their children to them. Instead, these 26 children were rescued from slavery in Mumbai, where they were working in a bag factory. The children were turned over to rehabilitation centers after they were recovered. This is one of several reports of its kind that occurred after the earthquake. Indian children were not the only victimized population as it was recounted that many Nepali children fell prey to this type of scheme as well.¹⁸³

In addition to the child trafficking vulnerability, disaster survivors in Nepal were susceptible to trafficking because of a lack of opportunity and desperation after the earthquake. Those already in poor classes, find it even harder to survive after a large disaster. Although actual data is not available, police estimate a 15 to 20 percent increase in trafficking cases after the earthquakes.¹⁸⁴ In one example, police in India uncovered a large trafficking network which exploited hundreds of women from areas impacted by the Gorkha earthquake.¹⁸⁵ These women were forced into sex work and manual labor. Police performed several arrests over a 10-day period.¹⁸⁶ The arrests saved 21 victims who were intercepted at the Delhi airport as they were about to board a plane to Dubai, as well as, other victims from a local hotel. The police commissioner reported that these women were promised lucrative jobs in the Gulf. He pointed out that the disaster was responsible for their increased vulnerability. Two men who were arrested confessed that in the past 3

¹⁸² Burke and Chaurasia.

¹⁸³ Burke and Chaurasia.

¹⁸⁴ Stephen Groves, "Nepal Earthquake Survivors Are Falling Prey to Human Trafficking," Public Radio International, November 15, 2016, <https://www.pri.org/stories/2016-11-15/nepal-earthquake-survivors-are-falling-prey-human-trafficking>.

¹⁸⁵ Jason Burke, "Indian Gangs Found Trafficking Women from Earthquake-Hit Nepal," *The Guardian*, July 30, 2015, <https://www.theguardian.com/law/2015/jul/30/indian-gangs-trafficking-women-nepal-earthquake>.

¹⁸⁶ Burke.

months, they coordinated travel from Nepal to Dubai and Saudi Arabia for over 250 trafficked women.¹⁸⁷ The police also discovered a scandal involving employees at the Delhi airport who passed these women through immigration checks in exchange for money.

These cases scratch the surface of the many human trafficking intercepts reported after the Nepal earthquake. Cases like this illustrate how when economic and human security indicators are already present before a disaster strikes, these issues will worsen in the aftermath of the disaster. In these cases, human security factors such as the disruption of livelihood become a critical vulnerability that led to trafficking. These factors linked with loss of income and other economic struggles cause people to make poor decisions and trust trafficking actors out of desperation.

C. METHODOLOGY APPLICATION

These case studies demonstrate how natural disasters create a vulnerable environment for both disaster survivors and foreign guest workers which can lead to human trafficking. Hurricane Katrina, the Boxing Day tsunami, and the Gorkha earthquake display a spectrum of trafficking exploitation examples which reveal economic, social, and human security indicators. This case sample presents multiple types of disasters from various cultures, which indicates these factors are agnostic and applicable to disaster environments regardless of location. The following analysis explores how the factors noted in this methodology were key components in the outlined case studies.

1. Economic Impact

All three case studies in this analysis illustrate how poor economic conditions in the aftermath of natural disasters create opportunities for human trafficking. Economic hardships were a major coercion factor throughout the case studies. Factors such as loss of income, destroyed property, and limited opportunities for new employment were compounding issues for the disaster survivors. The disaster environment also created a unique circumstance for traffickers to prey upon foreign guest workers who exhibit economic vulnerability in their home country. Foreign guest workers who were lacking

¹⁸⁷ Burke.

economic stability had an increased susceptibility to human trafficking. These case studies show how trafficking actors can creatively use economic hardship as a means for manipulating people in a disaster environment.

Disaster survivors in Nepal lost their homes and employment creating desperation that led them to being manipulated by traffickers who promised work or a better life for their children. These parents were desperate to help their children as their basic needs were not being met. Loss of income caused them to migrate back to India. The sudden financial uncertainty created by the disaster influenced their decision to give away their children. This example shows how desperation can cause people to make poor decisions and trust complete strangers in order to meet basic needs of themselves and their children. Desperation is a common consequence of a natural disaster due to economic instability from physical and financial losses suffered in a short period.¹⁸⁸

The foreign guest workers victimized after Hurricane Katrina are another example of how economic vulnerabilities can be exploited because of the opportunity created by a natural disaster. In the Signal International case and the Million Express Manpower case, victims paid a substantial amount of money upfront for recruitment fees which consequently placed the workers in major financial debt further deepening the economic pressure to succeed at that job opportunity provided by the trafficker. Once the workers arrived in the United States, this financial burden put the workers at the mercy of the traffickers because they feared deportation. Traffickers tightened their grip on these workers with other factors such as taking possession of their visa documentation, charging unfair housing fees, and monitoring them constantly. In the Signal case, the threat of deportation and the abuse led one trafficking victim to attempt suicide. This attempted suicide depicts how severe the fear of deportation is to these victims and how the economic factors pave the way for disaster worker labor trafficking.

Economic disparity was a key factor in the abuse of the victims mentioned in these case studies. Natural disasters create a suitable environment for trafficking activity to

¹⁸⁸ “Greater Impact: How Disasters Affect People of Low Socioeconomic Status,” *Disaster Technical Assistance Center Supplemental Research Bulletin*, July 2017, 6, https://www.samhsa.gov/sites/default/files/dtac/srb-low-ses_2.pdf.

occur. A natural disaster impedes the economic stability of disaster survivors while also creating a demand for low skill labor, which allows traffickers to lure foreign guest workers who are facing their own economic struggles. These cases validate the economic indicator explained in this theoretical model.

2. Social Impact

In these examples, the natural disaster environment exhibited social inequalities which left people vulnerable to human trafficking. Social factors such as cultural inequalities, language barriers, and education deprivation, were revealed in these cases. All of these social factors were amplified after the natural disaster struck and traffickers exploited these issues.

In the Audubon case, undocumented immigrants faced social inequalities, including discrimination, segregation, and low economic status. The men in this case were socially disadvantaged due to their undocumented status. The traffickers in this case kept them hostage because of their social disadvantages. They were treated so poorly and as less than human, the men were forced to eat pigeons they had to manually trap. This company segregated them from other workers and only forced these men to live in inhumane conditions. The social inequalities of these men allowed them to be exploited.

The Boxing Day tsunami case revealed that the lack of education and social resources for the population was exacerbated after the disaster, which allowed traffickers to manipulate the parents into giving away their children. Likewise, the Nepal Gorkha earthquake case, showed that a sudden disruption in social resources leaves a community abandoned. The local social structure which provided jobs, education, and other needed resources was instantly gone, and this forced entire populations to flee. The added chaos, confusion, and fear for these fleeing people, opened the door for trafficking actors to manipulate and exploit their social paralysis. To sum up, the social disparities represented in these cases left disaster survivors despondent and subject to human trafficking.

3. Human Security Impact

The cases illustrated in both the Gorkha earthquake, and the Boxing Day tsunami provide evidence of how the security of the people were impacted by a natural disaster resulting in human trafficking. Human security elements such as basic needs deprivation, fear, forced migration, and lack of governmental protections provided opportunity for trafficking. The scale and instant destabilization of the environment present a human security risk as well. In both of these cases, people lacked necessary security and well-being in the aftermath of the disaster that allowed trafficking to thrive.

People fell into a forced migration after the Gorkha earthquake for multiple reasons including fear and the absence of human security measures. This forced migration created an opportunity at the border between Nepal and India for traffickers to persuade people to turn their children over to them. The trafficking exploitation was successful not only due to the traffickers' manipulation, but also because of the poor border security offered by the government. If proper security were in place, the trafficking actors could have been deterred or even stopped. Mass migrations can be common after a major disaster and in this case proved to lead to trafficking actions.

The Gorkha earthquake showed other human security vulnerabilities including the lack of security for women from villages who were lured to a major trafficking ring in India. Large trafficking rings seek out vulnerable situations and present a major security risk for populations. One shocking element in this case is that the bribery airport workers to quickly process these women through security and immigration. This bribery displays a major breakdown in human security measures in a post-disaster environment.

The Boxing Day tsunami provided specific evidence that a void of human security can also place children in severe danger after a natural disaster. A unique human security breach caused by disasters is revealed in the case of the 4-year-old boy who was with the traffickers claiming to be his parents. The trust of children is volatile after a disaster and can easily be exploited by traffickers who appear to want to help the children. Beyond identifying this trust vulnerability, the Gorkha earthquake UNICEF report showed that disasters can displace large groups of children quickly. This fast displacement can

jeopardize human security and expose masses of children instantly to human trafficking activity.

Human security transcends borders and cultures, and all of the cases in this chapter show human trafficking does as well. In totality, these cases illustrate how substantial the global market is for human trafficking. In the Hurricane Katrina cases, immigrants from multiple parts of the world were trafficking into the United States for enslavement into work which supported disaster response. In the Gorkha and Boxing Day examples, disaster survivors were being taken from one country and trafficked to another for sex and labor crimes. These cases show how human trafficking creates a global human security risk that spans nations.

D. CONCLUSION

The common indicators addressed in this methodology have persisted in both human trafficking and disaster arenas. These indicators have local, national, and international implications. Figure 2 illustrates how the economic, social, and human security factors of both disasters and human trafficking intertwined to result in multiple human trafficking cases. Ultimately, this entanglement is the perfect storm for trafficking actions.

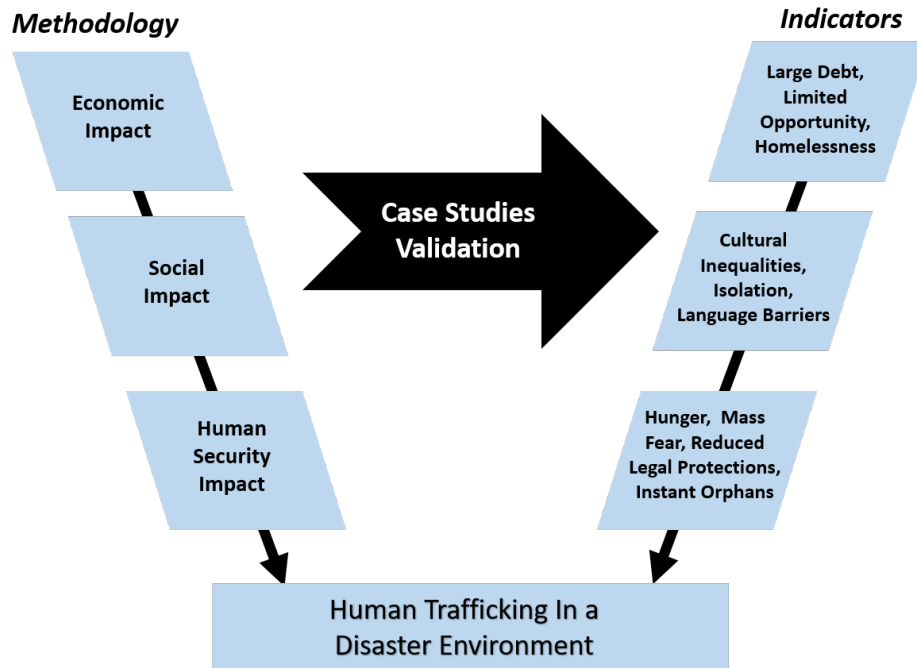


Figure 2. Illustration Demonstrating How Case Studies Validate Theoretical Model

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IV. CONCLUSIONS AND RECOMMENDATIONS

This thesis aspired to review common indicators linking human trafficking and post-natural-disaster environments and to further understand how this linkage can consequently lead to trafficking actions after a natural disaster incident. This chapter reviews the research findings and suggests a way forward.

A. FINDINGS

This investigation found that the effects of natural disasters overlap the causes of human trafficking. This thesis provided a theoretical framework that illustrated how this connection can present increased trafficking vulnerabilities in post-disaster environments. The framework was then tested against actual human trafficking cases that occurred in relation to natural disasters, which validated it.

In this context, the theory highlighted the social, economic, and human security factors that were present and significant in both human trafficking and natural disaster environments. Natural disasters destabilize populations by foundationally disrupting multiple aspects of individual's lives leaving people susceptible to trafficking manipulation. Reviewing and analyzing several cases and examples validated the theoretical framework presented in this research which illustrates how common indicators and vulnerabilities present in a post-disaster environment can lead to human trafficking exploitation.

As human trafficking and natural disasters are both global problems, this theoretical framework has universal applicability to any disaster or population in the world. Indeed, this research reviewed cases in various parts of the world to illustrate that regardless of disaster type or culture, these factors create susceptibility, and this research found that disaster survivors are not the only group of people subject to trafficking actions. A ripple effect leaves disaster workers at risk also. Ultimately, this research analysis confirms that post-natural-disaster environments have significant vulnerabilities that can result in an increased risk of human trafficking.

B. RECOMMENDATIONS

1. Increase Awareness and Implement Education Initiatives

Education is a powerful tool in combatting human trafficking. Increased awareness and teaching are necessary components in reducing trafficking actions in a post-disaster setting. Raising awareness is important at all levels of society and in every country because no one is immune to disaster activity as it is a growing concern globally. Placing educational material strategically in public facilities, using social media outlets for education and awareness, providing informative podcasts on the issues, and engaging existing community outreach groups along with educational institutions, are examples of proactive awareness initiatives. If these actions are coupled with responsive awareness measures, such as mandating human trafficking emergency responder training and certification programs, strategically posting awareness and educational materials in communities impacted by a disaster, and increasing awareness through other multi-media platforms, it will better protect communities and workers linked to a natural disaster from human trafficking.

If people impacted by a disaster are not properly educated on human trafficking, they can more easily fall prey to trafficking perpetrators because of the factors identified in this framework. Beyond self-preservation, knowledge can also be a great asset in eliminating trafficking activity in disaster-stricken areas. For example, in evaluating the labor trafficking cases in the United States, if the general public were more aware of trafficking and what resources are available to help victims, someone may have noticed the Hurricane Katrina workers who were being labor trafficked and reported the situation to authorities. If education and training were provided to pre-teen and teenage students in school, this could prove to reduce trafficking actions as this is a commonly victimized age group. Providing the public and emergency responders with key indicators of trafficking and further education could make a difference in anti-trafficking efforts.

This theoretical concept identifies specific factors and vulnerabilities associated with cases of both labor and sex trafficking alike. Traffickers will offer basic needs, financial assistance, and other provisions that entice prospective victims. Traffickers will

use every medium possible to attract potential victims through in-person and virtual contact. For example, a disaster survivor who has lost their home, vehicle, and other major assets may still have access to the internet through their mobile phone, which is all that is needed for the trafficker to make contact. The ease of access to disaster survivors is only a few clicks away as survivors often post to social media and checking advertisements online for housing, work, and other needs. Traffickers can begin laying the foundation of trust needed for coercion through chat sessions, social media posts, etc. This same virtual connection tactic needs to be used by authorities on the local, state, and federal level to alert disaster survivors to trafficking activity and bring awareness to the dangers associated with any known perpetrators. This recommendation can be effectuated through channels already established on social media such as police Twitter sites or Facebook sites, and new accounts could be created specifically tied to the disaster. This type of social engagement is quick to setup and could have a large impact in improving human trafficking education and awareness during disaster response. It is critical that creative approaches are considered to improve awareness of trafficking suspicions or trafficking crimes in a post-disaster environment.

Disasters may strike communities that have never been through such a detrimental and urgent circumstance and many may find themselves unprepared and overwhelmed. If proactive awareness and education were available before the disaster through government and community initiatives, and awareness materials for survivors and workers were present at the site of the disaster, these measures would help better prepare and protect communities from human trafficking actions in post-disaster scenarios. Ultimately improving awareness for communities and emergency responders will assist in reducing trafficking actions in post-disaster environments.

2. Improve Current Legislation and Programs

This recommendation relates to the United States and aims to improve current legislation and anti-trafficking programs in order to bolster efforts to combat trafficking in post-natural-disaster environments. Legislation should be amended to include harsher penalties for trafficking crimes occurring in the wake of a natural disaster because of the

heightened community vulnerability. In addition, current federal and state anti-trafficking programs should be updated to include information and guidance concerning the risk of post-disaster trafficking crimes. This two-pronged strategy could deter trafficking actors from committing crimes during post-disaster response and recovery.

Currently the U.S. human trafficking legislation does not mention natural-disaster related trafficking whatsoever, despite one of the largest human trafficking crimes ever prosecuted being tied to a natural disaster. This gap in legislation should be corrected by an amendment to specifically place additional penalties on trafficking crimes connected to disaster related activity. Improving both legislation and anti-trafficking programs could help to better protect citizens and workers in a post-disaster environment.

C. NEED FOR FURTHER RESEARCH

The evidence in this research points to a causal connection of multiple primary factors apparent in both human trafficking and a post-natural-disaster environment. Because of this association, this connection needs further study to better understand, and by extension, aid in the reduction of human trafficking incidents in a post-natural-disaster environment in the United States and throughout the world. Understanding human behavior and what allows people to be manipulated by traffickers in specific circumstances will help researchers, scholars, and experts to find new ways of preventing this pattern from continuing.

New research in this area could bring to light other human trafficking cases directly tied to natural disasters and evaluate conditions and circumstances that led to the trafficking incidents. Because of limitations in available case data, this research focused heavily on labor trafficking cases prosecuted after Hurricane Katrina. Additional research could focus on other realms of trafficking incidents that occur in post-disaster environments. Further study could also prove valuable for frontline emergency responder education and training initiatives, which benefits the overall goal to combat trafficking in post-disaster environments. Emergency response personnel may be the only outside source a victim encounters during disaster response making responders a key link to identifying and

reporting trafficking activity during disaster recovery. This research sheds light on this area of study and further research would be beneficial in combatting human trafficking globally.

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