Employing Digital Forensics to Prevent and Generate Accountability for Wartime Rapes

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Content Warning: Contains mentions of sexual violence

Phenomenon: Wartime Rape; Conflict Related Sexual Violence (CRSV)

- "the coerced ... petetration of the anus or vagina by the penis or another object, or of the mouth by the penis" (Cohen 2013, 462)
- rape is "a pattern of sexual violence perpetrated on civilians by agents of a state, political group, and/or politicized ethnic group. (Green 2004, p. 98)

Collective Rapes
Estimated Victims by
Conflict, 1991-2003
(Green 2004, 110)

Table 1

Collective Rapes 1991–2003

Country	Region	Duration	(Alleged) Actors	Targets	Estimated number of victims
Peru		1989–1993[a]	Peruvian military	Civilians, particularly suspected rebels	—
Somalia		1989–1996	Clan warriors	Civilians	—
Indonesia	Aceh	1989–2002	Indonesian military and police	Civilians	—
Liberia		1989–present	Liberian military, rebel forces	Civilians	—
Sri Lanka		1989–present	Sri Lankan military and police	Tamils	—
Kuwait		1990–1991	Iraqi military	Civilians	400–3,200
India	Kashmir	1990–present	Indian military and police, Islamic rebels	Civilians	—
India	Assam, Manipur, and Tripura	1990–present	Indian military and police	Civilians	—
India	Punjab	1991–1993	Indian military and police	Civilians	—
Myanmar	Arakan State	1991–1994	Burmese military	Muslims	—
Haiti		1991–1994	Haitian military, police and paramilitary	Civilians, particularly Aristide supporters	1,000s
Zaire		1991–1997	Zairian military	Civilians	—
Sierra Leone		1991–2000	Rebel militants	Civilians	—
Burundi		1991-present	Burundian Army, rebel militants	Civilians	—
Georgia	Abkhazia	1992–1993	Abkhazian rebels, possibly Georgian forces	Georgians	—
Afghanistan		1992–1994	Mujahedeen (rebel militants)	Civilians	—

Collective Rapes
Estimated Victims by
Conflict, 1991-2003
(Green 2004, 111)

Country	Region	Dates	Perpetrators	Victims	Estimated Victims
Bosnia		1992–1995	Serbian, Croatian and Bosnian militaries, police and paramilitaries	Civilians and Prisoners of War	20,000
Nigeria	Ogoniland	1992–1998	Nigerian military and security forces	Ogonis	—
Myanmar	Shan State	1992–present	Burmese military	Shans	625[b]
Algeria		1994–1996	Islamic rebels, possibly government forces	Civilians	3,600
Philippines		1994–2000	Islamic rebels	Civilians	—
Rwanda		1994	Hutu military and paramilitary	Tutsis	250,000
Uganda		1994–present	Rebel militants	Civilians	—
Myanmar	Karen State	1997–present	Burmese military	Karens and Karennis	—
Indonesia	Jakarta	1998	Indonesian military and police in collusion with civilians	Ethnic Chinese	66[b]–168[b]
Yugoslavia	Kosovo	1998–1999	Serbian military and paramilitary	Albanians	—
Congo Democratic Republic		1998–present	Foreign militaries, rebel militants, tribal groups	Civilians	1,000s
Indonesia	East Timor	1999	Indonesian military and police	Civilians	46[b]–100s
Zimbabwe		2000–present	Zimbabwean paramilitary	Civilians	1,000s
India	Gujarat	2002	Indian military and police, Muslim and Hindu extremists	Civilians, particularly Muslims	100s

[a]Newspaper articles published in or after 1991 indicate that the collective rape(s) began prior to 1991.
[b]Actual cases documented by agents of a state or nongovernmental organization.

Challenges to Addressing CRSV

- Underlying political-social factors
  - Larger states
  - Weak states
  - Regime-toppling insurgents
- Women's relative inequality, patriarchical societies
- Localized leadership perpetration
  - Forced recruitment

Technology: Digital Forensics

• Digital forensics is "the uncovering and examination of evidence located on all things electronic with digital storage, including computers, cell phones, and networks" (Garfinkel 2013, 370).

• Digital evidence is "information and data of value to an investigation that is stored on, received, or transmitted by an electronic device" (Freeman 2018, 297; Dutelle 2016, 374).

• Differences in definitions simplify to: digital forensics is the application of forensics techniques and procedures (preservation, collection, validation, identification, analysis, interpretation, documentation, and presentation) to digital evidence (Angelopoulou and Vidalis 2014, 57).

Advantages of Using Digital Forensics

Facilitate Peacebuilding

- Prevention

- Response

- Documentation

- Accountability

Prevent conflict-related sexual violence
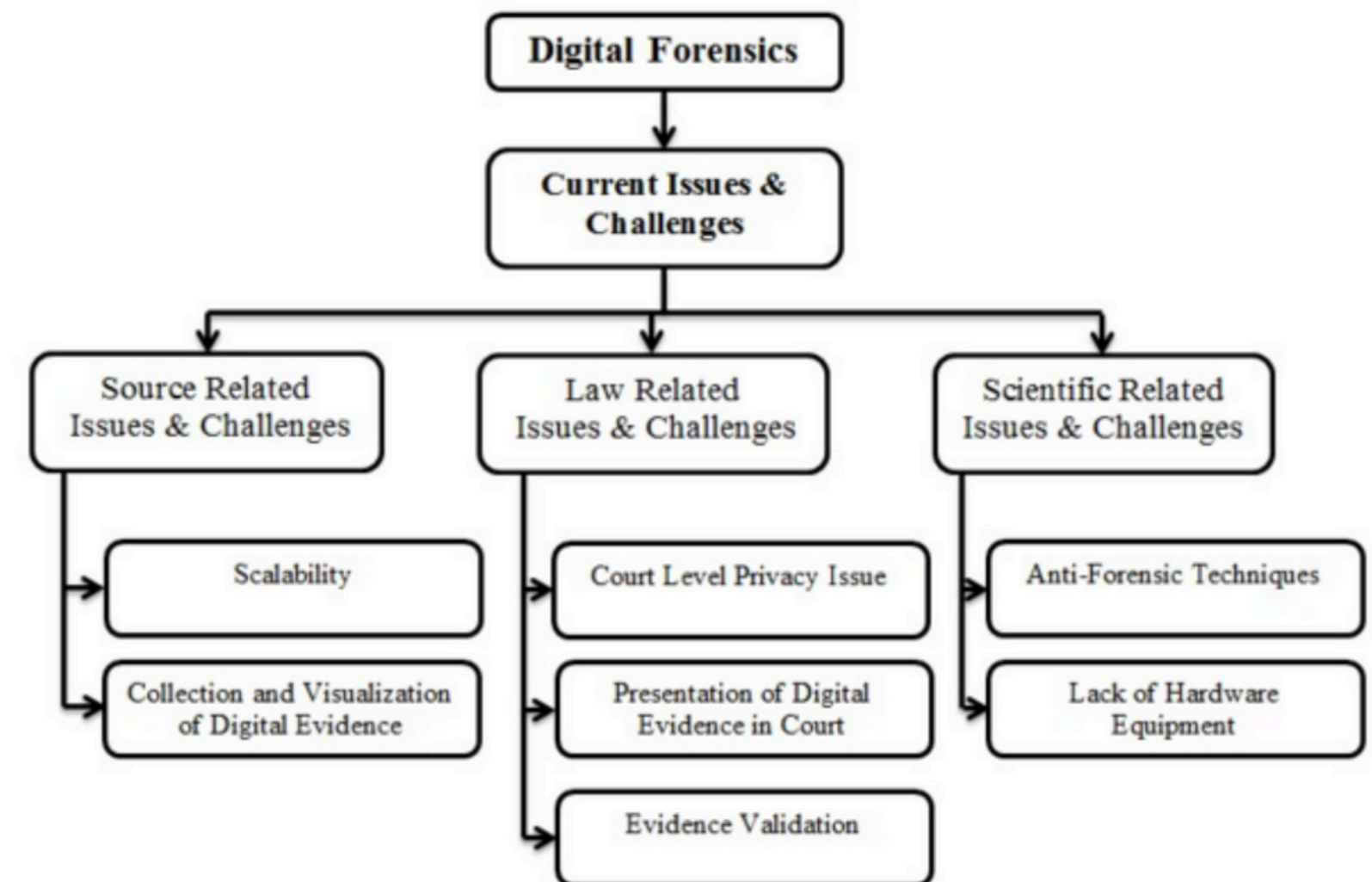
Enhance accountability

Meet the needs of survivors of sexual violence

UN Action against Sexual Violence in Conflict Goals, 2024

Limitations of Using Digital Forensics

- Within states with weak rule of law
- Authentication
- Proliferation
- Scope of data

Figure 6. Tree Structure of the Issues and Challenges of Digital Forensic

(Pandey et al. 2020, 38)

Potential Negative Effects of Using Digital Forensics

Hindering Peacebuilding:

- Exposes or creates a paper trail to track victims

- Retraumatizing victims who share their story

- The same technology that generates digital evidence can also be used to mediate digital abuse

Recommendations

- Prevention: Crowdsourcing information on CRSV through digital means
  - Employing hotlines
- Documentation: Field-level health information collection and documentation
- Collection of digital evidence from social media, cell phone data

There is some degree of accountability, but it is rare ... But I think that that does not imply, however, that we shouldn't be doing our best to collect all of the documentation that we possibly can in order to potentially hold perpetrators accountable."

Dara Kay Cohen, *NPR*, 2022

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