

# Famine as a Collateral Damage of War

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## Abstract

This contribution intends to assess the interplay between the proportionality rule and the prohibition of starvation, detailing how proportionality assessments undertaken by warring parties prior to launching attacks must take into consideration the food security situation of the affected civilian population, and the possibility of causing starvation. The article provides an analysis of the prohibition of starvation included in the Additional Protocols, outlining its inherent limitations. It then argues the need of evaluating the so-called “conflict-induced hunger” under the lens of the proportionality rule and gives an overview of how parties can include the evaluation of food insecurity and malnutrition levels in their assessment of collateral damages.

## Keywords

proportionality rule – prohibition of starvation – collateral damages – famine – IHL

## 1 Introduction

Ongoing reports from Syria, Yemen and South Sudan show that widespread starvation is occurring extensively among civilian populations living under conflict. While hunger and starvation are often considered unavoidable by-products of war, these current crises are revealing how conflict-induced hunger is increasingly being used by warring parties to control the civilian population.

Recent wars have seen an increase in the recourse to systematic attacks against agricultural fields and other objects indispensable for the survival of the population, which result in serious deprivations of food – endangering the

survival of local populations.<sup>1</sup> In addition, the use of sieges has resurged, causing widespread starvation among civilians in Syria<sup>2</sup> and South Sudan,<sup>3</sup> and blockades are currently being used in Yemen<sup>4</sup> and Gaza,<sup>5</sup> with the effect of limiting the entrance of humanitarian aid into the blockaded areas.

International humanitarian law ('IHL') prohibits the use of starvation of civilians as a method of warfare in both international armed conflicts ('IACS') and non-international armed conflicts ('NIACS'). However, such prohibitions only ban *intentional* starvation inflicted upon the civilian population. Proving the existence of such intent can be extremely difficult, and the current legal framework does not allow the prosecution of unintentional enforced starvation.

However, failing to prove the intent of the parties does not signify that conflict-induced hunger will be considered an acceptable consequence of war. The proportionality rule included under IHL prohibits all attacks which cause excessive damage among civilians and civilian objects. So far, common misconceptions and overly restrictive interpretations of this norm have prevented the inclusion of analysis regarding the spread of conflict-induced hunger in the proportionality assessment conducted by the parties before launching an attack. This has resulted in serious repercussions for civilian populations, which have often paid the disproportionate price of wars.

A broader interpretation of the proportionality rule, in accordance with emerging notions of 'indirect' and 'reverberating' effects, would likely prevent the infliction of food insecurity and famine, by effectively requiring warring parties to halt their military operations when these are foreseeably expected to cause the starvation of civilians.

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- 1 Human Rights Council, 'Report of the Detailed Findings of the Group of Eminent International and Regional Experts on Yemen' (3 September 2019) UN Doc A/HRC/42/CRP.1 para 752. See also Mohammad Kanfash and Ali Al-Jasem, 'Syrians are Watching their Crops Burn. These Crimes of Starvation Must End' *The Guardian* (London, 11 July 2019) <[www.theguardian.com/global-development/2019/jul/11/syrians-are-watching-their-crops-burn-these-starvation-crimes-must-end](http://www.theguardian.com/global-development/2019/jul/11/syrians-are-watching-their-crops-burn-these-starvation-crimes-must-end)>.
  - 2 Independent International Commission of Inquiry on the Syrian Arab Republic, 'Sieges as Weapons of War: Encircle, Starve, Surrender, Evacuate' (*OHCHR*, 29 May 2018) <[www.ohchr.org/Documents/HRBodies/HRCouncil/CoISyria/PolicyPaperSieges\\_29May2018.pdf](http://www.ohchr.org/Documents/HRBodies/HRCouncil/CoISyria/PolicyPaperSieges_29May2018.pdf)>.
  - 3 Global Rights Compliance and the World Peace Foundation, 'Accountability for Starvation Crimes: South Sudan' (*Starvation Accountability*, June 2019) <[starvationaccountability.org/wp-content/uploads/2019/11/Accountability-for-Starvation-South-Sudan.pdf](http://starvationaccountability.org/wp-content/uploads/2019/11/Accountability-for-Starvation-South-Sudan.pdf)> paras 32, 37.
  - 4 Norwegian Refugee Council, 'Yemenis in Free Fall One Year Since Blockade' (*Reliefweb*, 5 November 2018) <[reliefweb.int/report/yemen/yemenis-free-fall-one-year-blockade](http://reliefweb.int/report/yemen/yemenis-free-fall-one-year-blockade)>.
  - 5 Josef Federman, 'Israel's Gaza Blockade Under Scrutiny After Latest Violence' *AP News* (6 May 2019) <[www.apnews.com/7cc0aa222e1147f1bdab3a17d0662454](http://www.apnews.com/7cc0aa222e1147f1bdab3a17d0662454)>.

This contribution intends to assess the interplay between the proportionality rule and the prohibition of starvation, detailing how proportionality assessments undertaken by warring parties prior to launching attacks should take into consideration the possibility of causing the starvation of civilians. The paper dedicates its first sections to analysing the prohibition of starvation under IHL, describing its shortcomings, followed by an analysis of the proportionality rule and the latest developments in its interpretation.

## 2 The Prohibition of Starvation under International Humanitarian Law

Prosecuting instances of starvation has been nearly impossible so far. This is due to several reasons, including the lack or partial recognition of this crime in the Statutes of the International Courts mandated to prosecute war crimes.<sup>6</sup> The accountability gap for starvation crimes links back to historical and conceptual reasons which are not addressed in this article.<sup>7</sup> For the purposes of this contribution, it will suffice to mention that the legitimacy of the use of starvation as a method of warfare was acknowledged in the US Military Manual of 1863, also known as the 'Lieber Code', which reflected extensively customary law applicable at that time, and which considered starvation a legitimate act.<sup>8</sup> A similar conclusion was reached during the Nuremberg Trials, where a Military Tribunal held that starving civilians was not a prohibited act.<sup>9</sup> The Geneva Conventions of 1949 similarly did not prohibit the starvation of the civilian

6 Both the Statutes of the International Criminal Tribunal for the former Yugoslavia and of the International Criminal Tribunal for Rwanda did not include reference to the war crime of starvation. See the Updated Statute of the International Criminal Tribunal for the former Yugoslavia ('ICTY'), as adopted in UNSC Res 827 (25 May 1993) UN Doc S/RES/827, as amended by UNSC Res 1877 (7 July 2009) UN Doc S/RES/1877; Statute of the International Tribunal for Rwanda as adopted in UNSC Res 955 (8 November 1994) UN Doc S/RES/955. The Statute of the International Criminal Court ('ICC Statute'), until very recently, only included the war crime of starvation for international armed conflicts under Article 8(2)(b)(xxv). The ICC Statute has been recently amended in order to also include this crime for non-international armed conflicts: see Article 8(2)(e)(xix) and Assembly of States Parties to the ICC, 'Resolution on amendments to article 8 of the Rome Statute of the International Criminal Court' (6 December 2019) Resolution ICC-ASP/18/Res.5.

7 For an overview of the reasons at the base for the lack of prosecution on the crime of starvation see Alex de Waal, *Mass Starvation, The History and Future of Famine* (Polity 2018).

8 Francis Lieber, 'Instructions for the Government of Armies of the United States in the Field' (Government Printing Office 1863) art 17.

9 *United States v Von Leed* in Nuernberg Military Tribunals, *Trials of War Criminals Before the Nuremberg Military Tribunals – Volume II* (US Government Printing Office 1950) 563.

population. However, they introduced some obligations upon warring parties, which became bound to provide food and medical supplies to civilians.<sup>10</sup> Occupying Powers are nowadays also obliged by the Fourth Geneva Convention to allow for the passage of humanitarian relief if the whole or part of the population of the Occupied Territory is inadequately supplied.<sup>11</sup>

The prohibition on the use of starvation of civilians as a method of warfare was only introduced in IHL in the Additional Protocols of 1977,<sup>12</sup> both for IACs and NIACs, in Articles 54(1) AP I and 14 AP II respectively. The rule is also recognised to be part of customary IHL applicable in both types of conflicts.<sup>13</sup> It is important to note that this prohibition does not require the civilian population to die as a result of the deprivation of food or other essential supplies,<sup>14</sup> but is considered to be already breached when parties cause the population to suffer hunger, by depriving it of its sources of food<sup>15</sup> or other supplies necessary for its survival.<sup>16</sup>

10 Geneva Convention Relative to the Protection of Civilian Persons in Time of War (adopted 12 August 1949, entered into force 21 October 1950) 75 UNTS 287 ('GC IV') arts 23, 55.

11 Ibid art 59.

12 Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (adopted 8 June 1977, entered into force 7 December 1978) 1125 UNTS 3 ('AP I') art 54(1); Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (adopted 8 June 1977, entered into force 7 December 1978) 1125 UNTS 609 ('AP II') art 14.

13 Jean-Marie Henckaerts and Louise Doswald-Beck (eds), *Customary International Humanitarian Law – Volume 1: Rules* (CUP 2005) rule 53.

14 Daniel Frank, 'Article 8(2)(b)(xxv) – Starvation as a Method of Warfare' in Roy S Lee (ed), *The International Criminal Court: The Making of the Rome Statute: Issues, Negotiations, Results* (Kluwer Law International 1999).

15 Yves Sandoz, Christophe Swinarski and Bruno Zimmermann (eds), *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949* (Martinus Nijhoff 1987) AP I art 54, para 2089 ('Commentary to the Additional Protocols'): 'The term "starvation" is generally understood by everyone'. See also Commentary to the Additional Protocols, AP II art 14, para 4791: 'The term "starvation" means the action of subjecting people to famine, i.e., extreme and general scarcity of food'.

16 Frank (n 14) 204; Knut Dörmann, 'Preparatory Commission for the International Criminal Court: The Elements of War Crimes – Part II: Other Serious Violations of the Laws and Customs Applicable in International and Non-International Armed Conflicts' (2001) 83(842) IRRC 461, 475–476; Michael Cottier and Emilia Richard, 'Article 8, War Crimes – para. 2(b) (xxv)' in Otto Triffterer and Kai Ambos (eds), *The Rome Statute of the International Criminal Court: A Commentary* (3rd edn, CH Beck, Hart, Nomos 2016) 256. See also Jules Lobel, 'Expert Opinion Regarding the Threatened Destruction of Solar Panels in the Village of Imneizel that are Essential to the Survival of the Protected Civilian Population' (*Diakonia*, 20 April 2012) <[www.diakonia.se/globalassets/blocks-ihl-site/ihl-file-list/ihl-expert-opinions/the-threatened-destruction-of-solar-panels-of-the-village-of-imneizel.pdf](http://www.diakonia.se/globalassets/blocks-ihl-site/ihl-file-list/ihl-expert-opinions/the-threatened-destruction-of-solar-panels-of-the-village-of-imneizel.pdf)> 9;

The current framework enshrined in the Additional Protocols only prohibits the starvation of civilians, and does not prohibit the starvation of combatants, which remains a lawful tactic under IHL<sup>17</sup> unless it is imposed against combatants which have fallen into the hands of the enemy and have thus gained the status of prisoners of wars.<sup>18</sup> The recourse to such lawful tactic should not, however, result in excessive collateral damage among the population. As will be seen below, the proportionality rule prohibits attacks against legitimate military targets that may be expected to cause excessive death or injury to civilians.<sup>19</sup>

Notwithstanding the great relevance of the introduction of the prohibition of starvation against civilians as a method of warfare, breaches of this rule are usually difficult to prove since the Additional Protocols require starvation to be a deliberate act.<sup>20</sup> The requirement of purpose is also reflected in the customary law framework governing methods of warfare, such as blockades and sieges, which are generally not prohibited even when they cause the starvation of

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Christine Byron, *War Crimes and Crimes against Humanity in the Rome Statute of the International Criminal Court* (Manchester University Press 2009) 164.

- 17 Sandoz, Swinarski and Zimmermann (n 15) AP II art 14, para 4796: 'the use of blockade and siege as methods of warfare remain legitimate, provided they are directed exclusively against combatants'. See also Niels Melzer and Gloria Gaggioli, 'Methods of Warfare' in Dapo Akande and Ben Saul (eds), *Oxford Guide to International Humanitarian Law* (OUP 2019) (forthcoming).
- 18 See Geneva Convention Relative to the Treatment of Prisoners of War (adopted 12 August 1949, entered into force 21 October 1950) 75 UNTS 135 ('GC III') art 26, which requires detaining powers to provide prisoners of wars with daily food rations sufficient to keep them in 'good health'.
- 19 API arts 51(5)(b), 57(2)(a)(iii); Henckaerts and Doswald-Beck (n 13) rule 14. See also ICTY, 'Final Report to the Prosecutor Reviewing the NATO Bombing Campaign in the Federal Republic of Yugoslavia' (ICTY, 13 June 2000) <[www.icty.org/en/press/final-report-prosecutor-committee-established-review-nato-bombing-campaign-against-federal](http://www.icty.org/en/press/final-report-prosecutor-committee-established-review-nato-bombing-campaign-against-federal)> para 18 ('ICTY Final Report'). See also Ian Henderson, *The Contemporary Law of Targeting, Military Objectives, Proportionality and Precautions in Attack under Additional Protocol I* (Martinus Nijhoff 2009) 181.
- 20 Sandoz, Swinarski and Zimmermann (n 15) AP I art 54, para 2087: 'To use it [starvation] as a method of warfare would be to provoke it deliberately'. See also Michael Bothe, Karl Joseph Partsch and Waldemar Solf, *New Rules for Victims of Armed Conflicts: Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949* (2nd edn, Martinus Nijhoff 2013) 381: '[Article 54(2) API] does not prohibit the incidental distress of civilians resulting from otherwise lawful military operations. It would not, for example, be unlawful to attack or destroy a railroad line simply because the railroad was used to transport food needed to supply the population of a city, if the railroad was otherwise a military objective under Art. 52'.

the population, as long as their aim is to achieve a military objective.<sup>21</sup> By way of example, the San Remo Manual on the International Law Applicable to Armed Conflicts at Sea states that a naval blockade is prohibited if it has the *sole* purpose of starving the civilian population.<sup>22</sup> The same customary framework is considered to apply with regard to the imposition of sieges.<sup>23</sup>

Under International Criminal Law, the Statute of the International Criminal Court ('ICC Statute') prohibits the crime of '*intentionally* using starvation of civilians as a method of warfare' under Articles 8(2)(b)(xxv) and 8(2)(e)(xix),<sup>24</sup> requiring intentional, rather than purposeful, conduct.

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- 21 Henckaerts and Doswald-Beck (n 13) rule 53: 'the prohibition of starvation as a method of warfare does not prohibit siege warfare as long as the purpose is to achieve a military objective and not to starve a civilian population'. See also Sandoz, Swinarski and Zimmermann (n 15) AP II art 14, para 4796: 'the use of blockade and siege as methods of warfare remain legitimate, provided they are directed exclusively against combatants'. This paper does not analyse how the principle of proportionality applies to sieges and blockades and focuses mainly on the use of methods of warfare which qualify within the traditional definition of 'attack' under IHL, as enshrined in AP I art 49(1). To see the discussions on whether sieges and blockades qualify within the definition of 'attack', see Hersch Lauterpacht (ed), *Oppenheim's International Law – Volume II* (7th edn, Longmans 1952) 419; Bothe, Partsch and Solf (n 20) 329; Emanuela-Chiara Gillard, 'Sieges, the Law and Protecting Civilians' (Chatham House Briefing, 27 June 2019) <[www.chathamhouse.org/publication/sieges-law-and-protecting-civilians](http://www.chathamhouse.org/publication/sieges-law-and-protecting-civilians)>.
- 22 International Institute of Humanitarian Law, 'San Remo Manual' in Louise Doswald-Beck (ed), *San Remo Manual on International Law Applicable to Armed Conflicts at Sea* (CUP 1995) art 102(a): 'The declaration or establishment of a blockade is prohibited if: it has the sole purpose of starving the civilian population or denying it other objects essential for its survival'. See also Harvard University Program on Humanitarian Policy and Conflict Research ('HPCR'), *Manual on International Law Applicable to Air and Missile Warfare* (CUP 2009) art 157(a).
- 23 Sandoz, Swinarski and Zimmermann (n 15) AP II art 14, para 4796. See also Sandoz, Swinarski and Zimmermann (n 15) art 54, para 2096, which recognises that the prohibition of the use of starvation as a method of warfare applies in case of besiegement. See also Esbjörn Rosenblad, 'Starvation as a Method of Warfare, Conditions for regulation by Convention' (1973) 7(2) *International Law* 252; Yoram Dinstein, 'Siege warfare and the starvation of civilians' in Astrid Delissen and Gerard Taja (eds), *Humanitarian Law of Armed Conflict: Challenges Ahead. Essays in Honour of Frits Kalshoven* (Martinus Nijhoff 1991); Beth Van Schaack, 'Siege Warfare and the Starvation of Civilians as a Weapon of War and War Crime' (*Just Security*, 4 April 2016) <[www.justsecurity.org/29157/siege-warfare-starvation-civilians-war-crime/](http://www.justsecurity.org/29157/siege-warfare-starvation-civilians-war-crime/)>.
- 24 ICC Statute arts 8(2)(b)(xxv), 8(2)(e)(xix) (emphasis added). See also Assembly of States Parties, 'Elements of Crimes of the International Criminal Court' (9 September 2002) ICC-ASP/1/3 at 108, UN Doc PCNICC/2000/1/Add.2 (2000) arts 8(2)(b)(xxv), art 8(2)(e)(xix), Element Two, which both clarify that in order to establish such crime the perpetrator must have 'intended to starve civilians as a method of warfare'.

The requirement of motive implies that all those acts which are not aimed at causing the starvation of civilians, but which nonetheless have such effects, will not be prohibited by Articles 54(1) AP I and 14 AP II. Such a framework might lead warring parties to excuse their actions by stating that the starvation of the civilian population has not been imposed intentionally, but is mere collateral damage of their military operations. A practical example of the difficulty of discerning intentional starvation from the unintended consequences of lawful military tactics emerged in the context of the blockade in Gaza, where the imposition of the naval blockade was analysed by several Commissions of Inquiry, none of which was able to conclude that the blockade amounted to an explicit violation of the prohibition of the use of starvation as a method of warfare,<sup>25</sup> due to the difficulty of proving the intent of the blockading party.

While the intent or purpose of perpetrators is usually inferred in courts through the use of circumstantial evidence and by examination of the circumstances surrounding the commission of the crime,<sup>26</sup> proving the purpose or intent of perpetrators continues to be a difficult challenge in the prosecution of international crimes. In such circumstances, the IHL rule prohibiting the infliction of excessive collateral damage is likely to become an important term of reference in the evaluation of the conduct of the parties, by determining when their conduct is likely to surpass the proportionality threshold, turning a seemingly legitimate military operation into an unlawful one.

### 2.1 *Attacks against Objects Indispensable for the Survival of the Population*

In analysing the prohibition of starvation, it is worth noting that the requirement of purposeful conduct aimed at starving civilians is not only inserted in

25 Human Rights Council, 'Report of the International Fact-Finding Mission to Investigate Violations of International Law, including International Humanitarian and Human Rights Law, resulting from the Israeli Attacks on the Flotilla of Ships Carrying Humanitarian Assistance' (27 September 2010) UN Doc A/HRC/15/21 para 59, which found that the blockade was disproportionate and constituted a collective punishment; United Nations, 'Report of the Secretary-General's Panel of Inquiry on the 31 May 2010 Flotilla Incident' (2 September 2011) para 77, which found that the blockade was imposed for a legitimate aim. See also Government of Israel, 'The Public Commission Appointed to Examine the Maritime Incident of 31 May 2010 – Part One' (January 2011) para 76, which similarly found that the blockade was not violating the prohibition of starvation.

26 See *Prosecutor v Galić* (Judgment) ICTY IT-98-29-T (5 December 2003) [57]; *Prosecutor v Galić* (Judgment) ICTY IT-98-29-A (30 November 2006) [132]; *Prosecutor v Martić* (Judgment) ICTY IT-95-11-T (12 June 2007) [69]; *Prosecutor v Germain Katanga* (Judgment) ICC 01/04-01/07 (14 March 2014) [802].

paragraph 1 of Articles 54 AP I and 14 AP II, but also permeates other provisions related to this rule. However, as it will be described below, such requirement is likely to considerably limit the scope of application of this prohibition.

Articles 54(2) AP I and 14 AP II prohibit attacks directed against indispensable objects, 'such as foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works'. While these prohibitions are of fundamental importance, and provide for an important ban on attacks against objects indispensable for the survival of the population, they do not constitute a total prohibition to attack such objects.

The first limitation of these rules relates to the fact that the prohibition merely focuses on attacks directed against objects indispensable for the survival of the civilian population, therefore allowing attacks directed against legitimate military objectives which affect indispensable objects as an 'incidental result of an otherwise lawful attack on a different military objective'.<sup>27</sup> By way of example, an attack against a group of combatants could be considered legitimate, even if such group is located inside, or in the vicinity of, a crop field, and the attack results in the destruction of the crops. The same could be said for attacks which have the result of producing, as collateral damage, the destruction of water reservoirs, food markets, humanitarian aid items, or other objects indispensable for the survival of the population.

The second constraint is that, as mentioned in the text of Article 54(2) AP I, such attacks are only prohibited if carried out 'for the specific purpose of depriving the civilian population or adverse Party of their sustenance value'. The reference to this 'specific purpose' suggests that attacking, destroying, removing, or rendering such objects useless is not prohibited when such actions are specifically aimed at a legitimate purpose.<sup>28</sup> Parties would therefore be able to target agricultural areas for the purpose of preventing the enemy from advancing. On the contrary, bombarding such areas for the purpose of

<sup>27</sup> Cottier and Richard (n 16) 517, para 788.

<sup>28</sup> Henckaerts and Doswald-Beck (n 13) rule 54, which points out that upon ratification of Additional Protocol I, France and the United Kingdom stated that this provision had no application to attacks that were carried out for a specific purpose other than denying sustenance to the civilian population. See also US Department of Defense, *Law of War Manual* (DoD, December 2016) para 5.20.4, which excludes the liability of the warring party when the attack against a field is done with a different purpose than the one of starving the civilian population such as the purpose to 'prevent it from being used as concealment by the enemy' or when the party is 'destroying a supply route that is used to move military supplies but is also used to supply the civilian population with food'. See also HPCR (n 22) art 97(b), which prohibits such attacks only if committed with the specific purpose of destroying, removing or rendering useless such objects.



preventing the enemy from producing food would be usually considered to be prohibited.<sup>29</sup>

As a result of the inclusion of the specific purpose requirement, Article 54(2) AP I appears to effectively re-state the principle of distinction between civilians and military targets,<sup>30</sup> reiterating that attacks against civilian objects, including objects indispensable for the survival of the population, are prohibited because of the civilian qualification of such objects.

The two constraints posed by this framework mean that attacks undertaken without the required purpose, or those directed at a legitimate military objective impairing only collaterally indispensable objects, will not fall into the realm of the prohibition of starvation. As an example, a series of attacks against food markets in a rural area are likely to preclude the population from being able to gather food. However, failing to prove that such attacks were purposefully directed against such markets does not signify that acts of this kind will always be considered as legitimate under IHL.

In these situations, the proportionality rule comes to gain a fundamental role in the evaluation of the conduct of the parties: determining whether such acts can be considered as causing excessive damage among civilians. As it will be discussed in the following sections, including an evaluation of indirect and long-term effects into the proportionality assessment can lead parties to properly evaluate whether their actions are imposing starvation among civilians.

#### 2.1.1 Article 54(3)(b) AP I

Before turning to an evaluation of the proportionality rule, it is worth noting that AP I expressly includes a provision relating to the assessment of food insecurity during the conduct of hostilities. Article 54(3)(b) AP I reminds parties that, even when attacking objects used in direct support of the military action, ‘in no circumstances such attacks can leave the civilian population with such inadequate food or water as to cause its starvation or force its movement’.<sup>31</sup>

The reference made in this article is to those civilian objects which are turned into military objectives due to their use, but the novelty introduced by this provision is in that, since the destruction of such objects could affect the survival of the civilian population, parties are called to evaluate the possibility of causing the starvation of the population, or even precursory causes, such as the forced movement of civilians towards an area where they might not be able to have access to the necessary resources to survive. The novelty of Article 54(3)

29 See Sandoz, Swinarski and Zimmermann (n 15) AP I art 54, 655, footnote 13.

30 AP I arts 48, 51(2), 52(2); AP II art 13(2); Henckaerts and Doswald-Beck (n 13) rules 1, 7.

31 AP I art 54(3)(b).

AP I is that it places a high threshold upon parties, acknowledging that the starvation of civilians cannot be balanced against the military advantage gained by the parties, and thus precluding any attack likely to have such repercussions.<sup>32</sup> This is the case even when the military advantage at stake might be higher than the damage occurring among civilians.<sup>33</sup> The introduction of such a principle seems to provide for an important prohibition, which is likely to considerably restrain the freedom of the parties engaged in attacks directed against objects indispensable for the survival of the population.

### 2.2 *Bridging the Accountability Gap through the Proportionality Rule*

Despite the seemingly innovative framework introduced in the prohibition of attacks against objects indispensable for the survival of the population, the rule still appears to retain some intrinsic limitations. Firstly, it is not clear whether the provisions analysed above apply equally in NIACS, due to the fact that AP II does not include parallel provisions to those included in paragraphs 2 and 3 of Article 54 AP I,<sup>34</sup> and the application of such principles does not seem to be reflected in customary law.<sup>35</sup> Notwithstanding this discrepancy, the commentary on AP II seems to give a similar interpretation for NIACS.<sup>36</sup> Secondly, Article 54(3)(b) AP I calls on parties to halt their military operations when they are 'expected' to cause the starvation of civilians or their forced movement, without defining *when* the military operations of the parties can be expected to cause such casualties.

The current IHL framework on the prohibition of starvation of civilians therefore contains several restraints which considerably limit its scope of application, making it unfit for preventing all instances of man-made famines occurring during conflicts.

Including an assessment of situations of food insecurity into the proportionality rule is likely to counteract this *lacuna* and fill the accountability gap. This is due to the fact that the proportionality rule is free from the intricacies

32 Frank (n 14) 204.

33 See, for example, Sandoz, Swinarski and Zimmermann (n 15) AP I art 54, para 2106, which states that 'the adverse Party should, when using force, ensure that the population is not reduced to starvation or compelled to move'.

34 A similar dilemma applies for paras 4 and 5 of AP I art 54, which are not analysed here. Henckaerts and Doswald-Beck (n 13) commentary to rule 54.

35 Henckaerts and Doswald-Beck (n 13) commentary to rule 54.

36 Gloria Gaggioli, 'Joint Blog Series on International Law and Armed Conflict: Are Sieges Prohibited under Contemporary IHL?' (*EJIL: Talk!*, 30 January 2019) <[www.ejiltalk.org/joint-blog-series-on-international-law-and-armed-conflict-are-sieges-prohibited-under-contemporary-ihl/](http://www.ejiltalk.org/joint-blog-series-on-international-law-and-armed-conflict-are-sieges-prohibited-under-contemporary-ihl/)>, quoting Sandoz, Swinarski and Zimmermann (n 15) AP II art 14, paras 4806–4807.

analysed above, since it does not require a specific purpose upon the attacker, and it evaluates the collateral damage stemming from attacks directed against legitimate military targets.

However, the proportionality assessment has not been interpreted so far in a way that appropriately includes an evaluation of the insurgence of food insecurity among civilians. The exclusion of starvation from the proportionality rule may stem from the fact that famine tends to appear in the long term, rather than in the immediate aftermath of an attack. Another difficulty in evaluating famines is their multi-dimensional causes, including pre-existing circumstances.

The following sections will analyse the traditional understanding of the proportionality rule, and how this can be ameliorated in order to include an evaluation of the levels of food insecurity among civilians.

### 3 The Proportionality Rule

It is increasingly accepted that IHL enshrines a general principle applicable to most of its rules.<sup>37</sup> This section will, however, focus on the proportionality rule as it is enshrined in Articles 51 and 57 AP I, which prohibits warring parties from launching attacks which cause excessive incidental loss of civilian life, injury to civilians, or damage to civilian objects.<sup>38</sup> Another focus of this article will be on the obligation to take all feasible precautions to avoid or minimize collateral damage<sup>39</sup> – an obligation which is fundamentally connected to the proportionality rule and that, together with it, provides for a set of mutually reinforcing obligations.<sup>40</sup>

Both the proportionality rule and the rule on precautions aim at avoiding ‘collateral damage’ during the conduct of hostilities. In these circumstances, this term covers not only directly causing the death of civilians or serious injury to body or health,<sup>41</sup> but also the suffering imposed on civilians through deprivation of food and water. AP I considers violations of the proportionality

37 Emanuela-Chiara Gillard, ‘Proportionality in the Conduct of Hostilities. The Incidental Harm Side of the Assessment’ (Chatham House Research Paper, December 2018) <[www.chathamhouse.org/publication/proportionality-conduct-hostilities-incident-harm-side-assessment](http://www.chathamhouse.org/publication/proportionality-conduct-hostilities-incident-harm-side-assessment)> 7, para 16, citing Jans Kleffner, ‘Military Collaterals and Ius In Bello Proportionality’ (2018) 48 *Israel Yearbook on Human Rights* 43.

38 AP I arts 51(5)(b), 57(2)(a)(iii); Henckaerts and Doswald-Beck (n 13) rule 14.

39 AP I arts 57(2)(a)(iii), 57(2)(b); Henckaerts and Doswald-Beck (n 13) rule 15.

40 US Department of Defense (n 28) para 5.10.5.

41 Sandoz, Swinarski and Zimmermann (n 15) AP I art 51, para 1932.

rule as a grave breach,<sup>42</sup> while the ICC Statute criminalizes such violations only if the incidental effects are ‘clearly excessive’.<sup>43</sup> Both provisions only refer to IACS.

While it seems clear that the proportionality rule includes an obligation to evaluate whether military actions cause the starvation of civilians, there has been a reluctance to include these longer-term consequences in the assessment of collateral damage. The hesitation to do so mainly derives from the legacy of the most traditional approaches given to the proportionality norm, which usually considered that parties were only bound to assess direct effects stemming from their operations,<sup>44</sup> excluding any analysis of indirect or long-term effects produced from their attacks. The main argument raised against the inclusion of indirect effects in the proportionality evaluation relies on the objection that ‘there are too many potential variables outside of the attacker’s control that make it practically impossible to consider these effects as “expected”’.<sup>45</sup> This narrow interpretation has been adopted for instance by the US, which considers its military to be merely bound to evaluate direct civilian injuries or deaths.<sup>46</sup>

Such a restrictive interpretation excludes any evaluation of the repercussion that military operations might have on the food security situation among the population, due to the fact that malnutrition and starvation often do not appear as an immediate result, but rather tend to emerge in the longer term.<sup>47</sup> More specifically, food insecurity and starvation caused by conflicts are usually the result of a pattern of consistent attacks affecting, directly or indirectly, objects necessary for the survival of civilians, leading to their mass displacement.<sup>48</sup> Excluding an evaluation of indirect and longer term effects can lead

42 API art 85(3)(b).

43 ICC Statute art 8(2)(b)(iv).

44 Henderson (n 19) 207–208, citing Frits Kalshoven, ‘Remarks’ in The American Society of International Law, ‘Proceedings of the 86th Annual Meeting, Implementing Limitations on the Use of Force: The Doctrine of Proportionality and Necessity’ (1992) 45.

45 Laurent Gisel (ed), ‘The Principle of Proportionality and the Rules Concerning the Conduct of Hostilities under International Humanitarian Law’ (International Expert Meeting, Quebec Laval University and ICRC, 22–23 June 2016) 44.

46 Matthew Waxman, *International Law and the Politics of Urban Air Operations* (Rand Corporation 2005) 21, footnote 44.

47 See, for example, the comparison of levels of malnutrition in Yemen from September 2014 to January 2019 showing the gradual increase of levels of food insecurity: Integrated Food Security Phase Classification, *Yemen* (December 2018–January 2019) 6 <[www.ipcinfo.org/fileadmin/user\\_upload/ipcinfo/docs/1\\_IPC\\_Yemen\\_AFI\\_Situation\\_2018Dec2019Jan.pdf](http://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/1_IPC_Yemen_AFI_Situation_2018Dec2019Jan.pdf)>.

48 The intrinsic link between conflict and food insecurity has been acknowledged in FAO, IFAD, UNICEF, WFP and WHO, ‘The State of Food Security and Nutrition in the World,

parties to engage in their military operations without properly considering whether a pattern of attacks undertaken in a specific area might be likely to cause the insurgence of peaking levels of food insecurity among civilians.

Recent debates on the proportionality rule seem to have led to a general acceptance of the existence of an obligation upon parties to evaluate the long-term effects,<sup>49</sup> intended as those indirect consequences stemming from military attacks. A plausible reason for the evolution in the interpretation of the proportionality rule has been linked to the development of new means of warfare, which are now more capable of limiting direct collateral damage.<sup>50</sup> Another reason for the widespread adoption of this approach is based on the fact that the text of the Additional Protocols does not seem to preclude such inclusion.<sup>51</sup> Nowadays, several military manuals, as well as the Tallinn Manual, require parties to evaluate reverberating effects.<sup>52</sup>

Indirect or reverberating effects are considered to be those which do not immediately materialize from an attack and can be 'delayed by hours or even months following the attack or geographically widespread'.<sup>53</sup> There seems to be a growing consensus on the need to include in the assessment of the expected collateral damages, possible repercussions on the population which do not occur in the immediate aftermath of the attack<sup>54</sup> or in its immediate

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Building resilience for peace and food security' (Report, 2017) <docs.wfp.org/api/documents/WFP-000022419/download/?\_ga=2.190473387.106565379.1571739895-548923519.1565790484> ('FAO Report').

- 49 ICJ Final Report (n 19) para 18; Marco Sassòli, *International Humanitarian Law. Rules, Controversies, and Solutions to Problems Arising in Warfare* (Edward Elgar Publishing 2019) 361, para 8.321; Henderson (n 19) 207; Isabel Robinson and Ellen Nohle, 'Proportionality and Precautions in Attack: The Reverberating Effects of using Explosive Weapons in Populated Areas' (2016) 98(901) *IRRC* 107, 116.
- 50 Henderson (n 19) 207, quoting Michael N. Schmitt, 'The Principle of Discrimination in 21st Century Warfare' (2014) 2(1) *Yale Human Rights and Development Journal* 143, 168 (footnotes omitted).
- 51 Gisel (n 45) 44.
- 52 UK Ministry of Defence, *The Manual of the Law of Armed Conflict* (Ministry of Defence, 2004) para 5.33.4; US Department of Defense, *The Commander's Handbook on the Law of Naval Operations* (DoD, 2017) para 8.11.4. See also Commonwealth of Australia, *Australian Defence Force Publication* (Department of Defence, 2009) para 1.21; Michael N. Schmitt (ed), *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* (CUP 2017) 472, para 6.
- 53 Ian Henderson and Kate Reese, 'Proportionality under International Humanitarian Law: The "Reasonable Military Commander" Standard and Reverberating Effects' (2018) 51 *Vanderbilt Journal of Transnational Law* 1, 13.
- 54 See Robinson and Nohle (n 49) 116: 'Due to the increasing inclusion of the notion of reverberating effects in State practice, the same rule is considered to apply in customary law'. See also ICRC (ed), 'International Humanitarian Law and the Challenges of Contemporary

vicinity.<sup>55</sup> This is also true with regard to the humanitarian consequences caused by the attack.<sup>56</sup> The inclusion of such analysis is of extreme importance in the case of food insecurity, a collateral effect of war which usually shows its effects among the population after a considerable amount of time after the launch of the attacks.

Despite the widespread recognition of the importance of considering indirect effects, it still remains debated for how long those effects must be taken into account.<sup>57</sup> It is nowadays generally considered that incidental damages can be included in the proportionality assessment only if they meet the criteria of foreseeability and causation,<sup>58</sup> while remote or unforeseen indirect effects are excluded from such assessment.<sup>59</sup> The requirement of foreseeability is usually understood as referring to those effects which are ‘reasonably foreseeable at the time the attack was planned or launched, on the basis of information that the attacker had or could reasonably have been expected to have in the circumstances.’<sup>60</sup> The criterion of causation refers to those effects which are expected to occur from the attack in the ordinary course of events,<sup>61</sup> and ‘which would not occur but for the attack.’<sup>62</sup> The following paragraphs will detail how these criteria can be factored into the evaluation of the impact on the situation of food security of civilians.

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- Armed Conflicts’ (ICRC, October 2015) 52; Gisel (n 45) 3 and UK Ministry of Defence (n 52) para 5.33.4, calling the attacking Party to take into consideration the possibility that an attack against military fuel storage depot could have a foreseeable risk that burning fuel will flow into a civilian residential area and cause injury to the civilian population.
- 55 Bothe, Partsch and Solf (n 20) 406, highlighting that the 1974–1977 Diplomatic Conference rejected to limit incidental loss to those in the immediate vicinity of the military objective. See, however, *Prosecutor v Gotovina and Markac* (Judgment) ICTY IT-06-90, Vol. II (15 April 2011) [1898], which considered that strikes which occurred more than 200 meters away from a possible military target to be unlawful. Such decision was contested in appeal for how it calculated the margin of error, but not on the possibility to declare unlawful attacks on the basis of their distance to the military target (see *Prosecutor v Gotovina and Markac* (Judgment) ICTY IT-06-90-A (16 November 2012) [58]).
- 56 Gisel (n 45) paras 18–19, citing the statement from Norway in the framework of the Convention on Certain Conventional Weapons, which expressed the view that the commander should take into account ‘more long-term humanitarian problems’.
- 57 ICTY Final Report (n 19) para 23; Sassöli (n 49) 361, para 8.321.
- 58 Gillard (n 37) 18, para 63.
- 59 Jason Wright, ‘“Excessive” Ambiguity: Analysing and Refining the Proportionality Standard’ (2012) 94(886) IRRC 819, 838.
- 60 Gillard (n 37) 18–19, para 63. See also ICTY Final Report (n 19) para 21: ‘criminal responsibility would be entailed only in cases where the excessiveness of the incidental damage was obvious’.
- 61 ICTY Final Report (n 19) para 42.
- 62 *Ibid* para 45.

### 3.1 *Starvation and Its Foreseeability*

The criterion of foreseeability entails that only reasonably foreseeable effects should be factored into the proportionality assessment.<sup>63</sup> As previously mentioned, indirect and long-term effects are being increasingly considered to be included in the evaluation of collateral damage, as long as there can be a reasonable expectation that they will occur.

The inclusion of an assessment of reasonably foreseeable effects is also reflected in Article 56 of AP I, which prohibits attacks against works and installations containing dangerous forces, due to the possible consequential indirect harm upon the population. A similar reasoning lies behind the prohibition of starvation included in Articles 54 AP I and 14 AP II.<sup>64</sup> It is apparent that the starvation of civilians is not an effect which is likely to occur in the immediate aftermath of an attack; rather, it will become visible among the population only after a certain period of time.

Including an evaluation on the occurrence of starvation into the proportionality assessment is likely to lead parties to better evaluate whether their actions will foreseeably aggravate the situation among civilians. Moreover, such evaluation will most certainly not equate to including effects which cannot be reasonably foreseeable. The rule on precautions demands parties who plan or decide to launch an attack, to do 'everything feasible' to verify that the targets of the attack are legitimate, and that the proportionality rule is expected to be respected.<sup>65</sup> It is nowadays undisputed that this rule implies the obligation upon parties to gather all available information before launching an attack.<sup>66</sup> Levels of food insecurity in all conflict areas are updated monthly in the Integrated Food Security Phase Classification ('IPC'), with the aim to 'determine the severity and magnitude of acute and chronic food insecurity, and acute malnutrition situations in a country, according to internationally-recognised scientific standards'.<sup>67</sup> The IPC classification has become a widely recognised measurement for levels of food insecurity and malnutrition, and the findings are shared publicly, thus rendering parties aware of which areas are to be considered the most affected by famine.

63 Schmitt (n 50) 168, para 55; Henderson (n 19) 207.

64 Henderson (n 19) 210.

65 AP I art 57(2)(a)(i), which calls on parties to 'do everything feasible to verify that [...] it is not prohibited by the provisions of this protocol to attack [their military objectives]'. See also Gillard (n 37) 16, para 54; Sassòli (n 49) 366, para 8.331.

66 *Prosecutor v Galić* (Judgment) ICTY IT-98-29 (5 December 2003) [58]. See also Robinson and Nohle (n 49) 120.

67 Integrated Food Security Phase Classification, *IPC Overview and Classification System* <[www.ipcinfo.org/ipcinfo-website/ipc-overview-and-classification-system/en/](http://www.ipcinfo.org/ipcinfo-website/ipc-overview-and-classification-system/en/)>.

As a consequence, in addressing the collateral damage expected to result in an area, especially those which have been reported in the IPC classification as being at risk of suffering from malnutrition, parties will be bound to assess whether their military operations would feasibly have an impact on food producing areas, food distribution places, and other related items. Failing to take into account such available information could render parties liable for issuing attacks that are reasonably expected to exacerbate the possibility for civilians to access food and humanitarian aid. Such conduct could violate the proportionality rule if the military advantage expected to be gained from the attack is not proportionate to the damage expected to be caused.<sup>68</sup>

In certain circumstances, the link between launching a military attack and the worsening of the humanitarian situation on the ground will be clearly foreseeable; for instance, in the case of an attack targeting the only accessible bridge used for the transportation of humanitarian relief inside a town. It is obvious that in such a case the subsequent deterioration of the humanitarian situation will be considered a foreseeable effect, which must be taken into account by the targeting party in its proportionality assessment. Such an evaluation was done by the International Criminal Tribunal for the former Yugoslavia ('ICTY') Trial Chamber, which endorsed this view in the *Prlić et al.* case when analysing the destruction of the Old Bridge in Mostar (Bosnia). The Tribunal found that the attack was disproportionate, since it made it 'impossible for [residents] to get food and medical supplies, resulting in a serious deterioration of the humanitarian situation for the population living there'.<sup>69</sup> In this case the Tribunal analysed the failure to evaluate the possible incidental humanitarian effects which, in the view of the judges, were clearly foreseeable.

Other examples of this kind include attacks against legitimate targets which are situated next to silos containing wheat to be distributed among the population, or other objects indispensable for the survival of the population, such as drinking water installations. If the attack is expected to damage such objects and to further debilitate the population living in a certain area, causing significant collateral damage, the rule on precaution under IHL demands parties to cancel such targeting.<sup>70</sup>

While the situations described above involve a close link between the attack and the sustenance of the population, the same foreseeable effects can be established when analysing damages caused by military operations in wider areas, such as for attacks causing damage to agricultural areas or objects

68 AP I art 51(5)(b).

69 *Prosecutor v Prlić* (Judgment) ICTY IT-04-74-T, Vol II (29 May 2013) [1582]–[1584].

70 AP I art 57(2)(b).



necessary for the production and distribution of food. However, in such circumstances, legitimate concerns might arise with regard to the chain of causation between the attack and the damage that occurred, which will be analysed in the following section.

### 3.2 *The Requirement of Causation*

The element of causation requires parties to take into consideration damages which are expected to occur from the attack in the ordinary course of events, and which would occur but for the attack. The necessity of a direct causal link between the attack and the harm likely to result from it excludes from the proportionality assessment all those effects which fail to respect such requirement.

It is apparent that, apart from the examples analysed in the previous section, a single attack will most probably not be likely to directly cause the starvation of the civilian population. While an attack which destroys a silo containing several tons of wheat might have a direct impact on the food security situation of the population, more often, the deprivation of food and water will likely be the result of a campaign of attacks affecting agricultural areas, water reservoirs, or other objects indispensable for the survival of the population.<sup>71</sup> If the proportionality of attacks is evaluated in their singularity, it is apparent that the chain of causation will, at least most of the time, fail to prove the existence of a link between the single attack and the deprivation of food occurring among civilians.

In analysing the requirement of causation, it is therefore fundamental to consider two elements. Firstly, that the evaluation of the proportionality of military attacks has been interpreted as referring to the military operations 'as a whole', and secondly, that the proportionality assessment has been read as including cumulative effects stemming from the attacks.

With regard to the first yardstick, it has been acknowledged that the proportionality of certain attacks must be evaluated in light of the overall military operation.<sup>72</sup> This is linked to the fact that the military advantage expected to be gained is not calculated by advantage gained from a single attack, but rather in light of the 'attack as a whole'.<sup>73</sup> As explained in the International Committee

71 FAO Report (n 48) 39, 44.

72 Amichai Cohen and Yuval Shany, 'Contextualizing Proportionality Analysis? A Response to Schmitt and Merriam on Israel's Targeting Practices' (*Just Security*, 7 May 2015) <[www.justsecurity.org/22786/contextualizing-proportionality-analysis-response-schmitt-merriam/](http://www.justsecurity.org/22786/contextualizing-proportionality-analysis-response-schmitt-merriam/)>.

73 Gillard (n 37) 9, footnote 18, which notes that in ratifying AP I, several States added interpretive statements which explain that they consider the military advantage from an

of the Red Cross' (ICRC) Commentary to AP I, 'an attack carried out in a concerted manner in numerous places can only be judged in its entirety'.<sup>74</sup> This is considered to apply even though 'isolated or particular parts may constitute distinct "attacks" as defined in IHL'.<sup>75</sup>

Identifying what amounts to 'attack as a whole' provides a frame of reference for understanding what will be included in the proportionality assessment. Is it generally considered that, if a single attack is part of a larger operation, then the operation must be considered as an 'attack as a whole', rather than focusing on each single attack.<sup>76</sup> As a result, 'a set of attacks against different targets may also constitute the "attack as a whole" if the military advantage anticipated from engaging one target is dependent – in part or in full – on engaging other targets'.<sup>77</sup> The effect of a set of attacks causing damage to objects indispensable for the survival of the population could therefore, under certain circumstances, be assessed in their totality.

However, even by accepting that some sets of attacks might be evaluated in their totality rather than in their singularity, the focus on the wide operational context of the operations should not result in rendering useless the parameters provided under Article 52(2) AP I, which require the military advantage to be 'concrete and direct'.<sup>78</sup> An overly broad interpretation of what constitutes a military attack 'as a whole' must not result in the evaluation of the legitimacy of the military advantage gained from the entirety of the armed conflict,<sup>79</sup> but should rather refer to a substantial and relatively close military advantage, excluding advantages which are hardly perceptible, as well as those which would only appear in the long term.<sup>80</sup> Notwithstanding this genuine precaution in interpreting what can be considered as an 'attack as a whole', the focus on

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attack to refer to the 'advantage anticipated from the attack as a whole and not only from isolated or particular parts of an attack'. The author also notes that States which are not parties to Additional Protocol I have also made similar statements; see, for example, US Department of Defense (n 28) 264; Israeli Ministry of Foreign Affairs, *The 2014 Gaza Conflict (7 July–26 August 2014): Factual and Legal Aspects* (May 2015) <mfa.gov.il/ProtectiveEdge/Documents/2014GazaConflictFullReport.pdf> 181; ICITY Final Report (n 19) para 78; Henderson (n 19) 201.

74 Sandoz, Swinarski and Zimmermann (n 15) AP I art 57, para 2218.

75 Gillard (n 37) 9, para 26.

76 Bothe (n 20) 329.

77 Gillard (n 37) 10, para 28.

78 Gisel (n 45) 13.

79 Knut Dörmann, 'Obligations of International Humanitarian Law' (2012) 4(2) *Military and Strategic Affairs* 11, 15; Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (2nd edn, CUP 2010) 94, para 232.

80 Sandoz, Swinarski and Zimmermann (n 15) AP I art 57, para 2209.

pattern of attacks which occur in a specific area<sup>81</sup> remains a valuable and useful parameter to evaluate the proportionality of the military attacks of the warring parties.

A concrete example of the importance of focusing on a pattern of attacks is the aerial attacks in Yemen conducted by the Saudi-led Coalition, which are affecting several agricultural areas, specifically in the breadbasket area of the country.<sup>82</sup> Assuming that these attacks are directed against legitimate military objectives, and are not intended to starve the civilian population, a single attack affecting an agricultural field will not be capable of causing the starvation of the population and will fail to meet the causation requirement. As a consequence, such attack will likely be deemed to have respected the proportionality rule. The same result is achieved even by adding to the proportionality assessment an evaluation of long-term effects stemming from the single attack. This is due to the fact that a single strike destroying one field will not have the effect of precluding the population from getting access to food from other sources. However, a pattern of attacks, which consistently damage objects indispensable for the survival of the population, might be likely to reduce an area to famine and force civilians to flee. Continuous and systematic attacks impacting foodstuffs, agricultural areas, drinking water installations, and other objects indispensable for the survival of the population, will in fact slowly cripple the resilience of civilians each time these items are destroyed.

#### 4 The Cumulative Effects Stemming from the Attacks

There are currently some discussions on whether parties should include in their proportionality assessment previous damage caused by their military

81 As confirmed by the Eritrea Ethiopia Claims Commission ('EECC'), which focused on the effect of patterns of attacks. Ethiopia carried out a pattern of indiscriminate aerial bombardments that caused civilian casualties and property losses at a number of different places. The approach taken by the Commission was to rule on an individual incident only when that incident was unusually serious, either because of the large number of victims or because it entailed a serious violation of IHL: *Eritrea-Ethiopia Claims Commission* (Partial Award: Western Front, Aerial Bombardment and Related Claims) (2005) 26 RIAA 291 [91].

82 Derek Watkins and Declan Walsh, 'Saudi Strikes, American Bombs, Yemeni Suffering' *New York Times* (27 December 2018) <[www.nytimes.com/interactive/2018/12/27/world/middleeast/saudi-arabia-war-tactics-yemen-humanitarian-crisis.html](http://www.nytimes.com/interactive/2018/12/27/world/middleeast/saudi-arabia-war-tactics-yemen-humanitarian-crisis.html)>; Martha Mundy, 'Empire of Information: The War on Yemen and its Agricultural Sector' (London School of Economics, 2018) <[blogs.lse.ac.uk/mec/2017/06/19/empire-of-information-the-war-on-yemen-and-its-agricultural-sector/](http://blogs.lse.ac.uk/mec/2017/06/19/empire-of-information-the-war-on-yemen-and-its-agricultural-sector/)>.

operations. The importance of focusing on what is referred to as ‘cumulative effects’ has been firstly acknowledged by the ICTY in the *Kupreskic* Trial Judgment, which developed the so-called ‘cumulative effect doctrine’, and concluded that an extended campaign consisting of a series of attacks, each of which might not violate the proportionality rule, could in the end lead to the conclusion that the campaign was disproportionate because of its cumulative effect on civilians.<sup>83</sup>

While it is hard not to sympathise with the ruling of the Tribunal, which was based on concerns regarding the compliance of the parties to the ‘demands of humanity’,<sup>84</sup> the outcome of this reasoning has raised some justified concerns.<sup>85</sup> It has been outlined that the suggestion of the Tribunal to consider as unlawful a series of attacks which singularly abide to the proportionality rule, because of their cumulative effects, is a dangerous assumption.<sup>86</sup> Instead, it has been suggested that such situations should rather raise questions on whether the attacker respected the obligations set under the principle of precaution to minimize such harm.<sup>87</sup>

The rule on precautions, as included in Article 57(2)(a)(iii) AP I, requires parties to take all feasible precautions to minimize incidental damage, even when the proportionality rule would not be violated *per se*. The obligation to minimize collateral damages in planning the attack ‘precedes the subsequent obligation to refrain from disproportionate attacks’.<sup>88</sup> It is therefore certainly accurate to state that the precautionary principle applies in such circumstances.

However, while the ruling of the ICTY in the *Kupreskic* case was badly phrased, and it is clear that ‘the mere cumulation of such instances, all of which are deemed to have been lawful, cannot *ipso facto* be said to amount to a crime’,<sup>89</sup> the analysis of cumulative effects should not be diverted outside of the scope of the proportionality rule.

Cumulative effects are in fact deeply interlinked with the proportionality assessment. This is due to the fact that the evaluation of what constitutes

83 *Prosecutor v Kupreskic & Ors* (Judgment) ICTY IT 95–16 (14 January 2000) [526].

84 *Ibid.*

85 ICTY Final Report (n 19) para 52; Luisa Vierucci, ‘Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia’ in Gianni Angelucci and Luisa Vierucci (eds), *Diritto Internazionale Umanitario e la Guerra Aerea, Scritti scelti* (Firenze University Press 2010) 115.

86 ICTY Final Report (n 19) para 52; Gillard (n 37) 10, para 30.

87 Gillard (n 37) 10, para 30.

88 Wright (n 59) 827.

89 ICTY Final Report (n 19) para 52.

'excessive' damages relates to the subjective assessment undertaken by the person launching the attack, which is understood as a reasonably well-informed person acting in good faith.<sup>90</sup> This subjective assessment is also required when evaluating cumulative damages. Since the attacking party will be aware of the previous effects caused by way of its own actions, such knowledge will render the attacking party aware of the possible disproportion of future attacks.

As mentioned by the ICRC:

the more the foreseeability of such reverberating effects can be linked to the area of knowledge of the attacking party, the more robust the obligation to refrain from launching indiscriminate or disproportionate attacks will play a strong role, requesting the Party to refrain from launching it.<sup>91</sup>

As a consequence, cumulative effects will not transform a set of proportionate attacks into a disproportionate campaign, as stated by the ICTY in the *Kupreskic* case; rather, they will render subsequent attacks disproportionate *ex-ante*. A campaign conducted with the awareness that disproportionate effects were being caused will result in it being considered disproportionate, in light of the cumulative effects caused. The importance of inserting such an evaluation lies in the fact that cumulative effects will demonstrate that, notwithstanding the awareness of the serious disproportionate casualties stemming from military operations, the attacking party continued its military campaign. This was confirmed by the ICTY in the *Galić* case, where the Tribunal substantiated that 'certain apparently disproportionate attacks may give rise to the inference that civilians were actually the object of attack',<sup>92</sup> linking the evaluation of the proportionality assessment to the proof of intent upon the attacking party.

In the case of starvation, it is extremely important to shift the focus from the effects of a single attack, to the effects produced by a campaign of attacks affecting, for example, agricultural areas. This is also evident from the parallel provisions prohibiting the use of starvation 'as a method of warfare',<sup>93</sup> a term

90 *Prosecutor v Galić* (Judgment) ICTY IT-98-29-T (5 December 2003) [58]; Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict* (n 79) 361; Judith Gardam, *Necessity, Proportionality and the Use of Force by States* (CUP 2004) 98; Wright (n 59) 839. See also ICTY Final Report (n 19) para 20.

91 ICRC, 'Urban Services during Protracted Armed Conflict: a Call for a Better Approach to assisting Affected People' (ICRC, 2015) <[www.icrc.org/en/explosive-weapons-populated-areas](http://www.icrc.org/en/explosive-weapons-populated-areas)>.

92 *Prosecutor v Galić* (Judgment) ICTY IT-98-29-T (5 December 2003) [60].

93 AP I art 54(1) and AP II art 14.

which refers to ‘tactical or strategic ways of conducting hostilities’.<sup>94</sup> While, as discussed above, the prohibition of starvation does not take into account collateral damage caused by the parties, but rather focuses on the deliberate and intentional infliction of hunger among the population, the reference to its use as a ‘method of warfare’ inherently implies that the assessment of the conduct of the warring parties will have to focus on the overall effects stemming from the adoption of such tactics, and not only on specific acts.

#### 4.1 *Pre-existing Circumstances and External Factors*

Situations of starvation and food insecurity might be caused by the occurrence of a multi-faced pattern of triggering factors. In several circumstances, conflict happens where food insecurity levels are already high. In such cases, it will certainly be more difficult to prove that an attack, or a pattern of attacks, are the sole reason that caused the starvation of civilians.

However, the presence of pre-existing factors must not be read as a rubber-stamp, condoning any responsibility of the warring parties engaged in military operations affecting objects indispensable for the survival of the population. The proportionality assessment does not in fact preclude the inclusion of external factors capable of amplifying the effects of the attack, as long as the focus of the evaluation remains limited to the physical effects of the attack,<sup>95</sup> and it is not unduly broadened to other effects. If an attack is expected to debilitate the population in its possibility to access food, the pre-existence of food insecurity levels in the area due to external factors, such as economic breakdowns or the general lack of food supplies in the area, should not exclude the responsibility of the party for causing disproportionate effects.

Such assertion should nevertheless be taken with due precaution, without resulting in warring parties being responsible for the insurgence of food insecurity or hunger levels to which they did not contribute. In order to prove the culpability of the parties, it still remains crucial to link such insurgence to the physical effects of the attack. The previous paragraphs have detailed how the casualties of single attacks can be read in light of the effects of a pattern of attacks and in light of the cumulative effects caused by such operations, which continue to provide a parameter in the evaluation of the proportionality of attacks undertaken in areas where pre-existing circumstances contribute to the spreading of famine among civilians. A pattern of attacks which cause the collateral effects of disrupting agricultural fields, food reservoirs, or food

94 Marco Sassòli, Antoine Bouvier and Anne Quintin, *How Does Law Protect in War?* (ICRC 2011) 280.

95 Gillard (n 37) 15, para 45.

production or distribution systems, in an area affected by pre-existing food insecurity, could violate the proportionality rule if it falls within the criteria described above.

## 5 Concluding Remarks

The above analysis has demonstrated the need to include in the proportionality assessment the effects that military attacks have on the food security situation of civilians. While the prohibition of starvation enshrined in the Additional Protocols limits its scope to intentional acts aimed at starving the population, the so-called 'incidental starvation' of civilians can, and should, be included in the evaluation of the proportionality of the conduct of the parties.

The proportionality rule requires parties to conduct a comprehensive evaluation of the effects of their military engagement, with a view to limiting the casualties occurring among civilians. The First Additional Protocol reminds parties that, when engaging in military attacks directed against objects indispensable for the survival of the population used in direct support of military action, 'in no event shall actions against these objects be taken which may be expected to leave the civilian population with such inadequate food or water as to cause its starvation or force its movement'. A similar evaluation should apply in the context of attacks directed against legitimate military targets, when such attacks only indirectly affect objects indispensable to the survival of the population, and have the incidental effect of causing the starvation of civilians.

In order to achieve this, a broader interpretation of the proportionality assessment should be adopted. The inclusion of indirect effects, such as those appearing in the longer-term as a result of certain military campaigns, in combination with an analysis of the IPC classification, would make parties aware of the impact of their operations on the food insecurity levels among civilians, and the likelihood of causing the starvation of the population.

This article also argued that parties should evaluate the effects of their operations in light of the effects of the pattern of attacks conducted in specific areas, and in light of the cumulative effects produced therein, in order to adequately evaluate the effects of their operations.

The infliction of famines during conflicts continues to be a scourge on civilian populations, and should thus be adequately addressed and counteracted, without being relegated to a mere consequence of war. In order to do so, a shift in the current understanding of the obligation upon warring parties, aimed at including broader effects of the military operations of belligerents, should be

adopted. In a time where conflicts are increasingly protracted for years, the inclusion of such analysis come to gain a fundamental role in ensuring the protection of the civilian population during wars.

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