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# Reviewing the situation in the aftermath of the 2019 Brazilian mystery oil spill

*Reviewing the situation in the aftermath of the 2019 Brazilian mystery oil spill*

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## ABSTRACT

More people are becoming at risk of oil spill disasters as oil transportation is continuously rising day by day. Oil spills occur when petroleum oil is released into the ocean following accidents, such as vessels crashing or damage and problems with oil platforms and drilling. Oil spill can have devastating effects on the environment, affecting marine and coastal ecologies, and are not easy to remove. This research article aims at reviewing the in-place disaster management process with respect of oil spills. The same will be done through the lens of 2019 Brazilian mystery oil spill. It shall also analyze the existing international instruments including the Bunker Convention. The disaster management process shall cover starting from the very beginning the preparation to deal with such disasters, their detection, managing the same and will end at elaborating the provision of compensation including the prospects of ecological compensation. In the end, the researchers will attempt to bring out certain workable suggestions to deal with oil spills in such a manner so as to minimize the adverse effects of them on marine life, coastal ecologies and

## RESUMO

Mais pessoas estão se tornando vulneráveis a desastres de derramamento de óleo à medida que o transporte de óleo continua aumentando dia após dia. Derramamentos de óleo ocorrem quando o petróleo é liberado no oceano após acidentes, como colisões de embarcações ou danos e problemas com plataformas e perfuração de petróleo. Derramamentos de óleo podem ter efeitos devastadores no meio ambiente, afetando as ecologias marinhas e costeiras, e não são fáceis de remover. Este artigo de pesquisa tem como objetivo revisar o processo de gestão de desastres em relação aos derramamentos de óleo. O mesmo será feito através da lente do derramamento misterioso de óleo no Brasil em 2019. Também analisará os instrumentos internacionais existentes, incluindo a Convenção Bunker. O processo de gestão de desastres abrangerá desde o início a preparação para lidar com tais desastres, sua detecção, gerenciamento dos mesmos e terminará elaborando a provisão de compensação, incluindo as perspectivas de compensação ecológica. No final, os pesquisadores tentarão apresentar sugestões viáveis para lidar com derramamentos de óleo de maneira a minimizar os efeitos

<sup>1</sup> Lattes: <http://lattes.cnpq.br/9206947061947088>

<sup>2</sup> Lattes: <http://lattes.cnpq.br/1148537304283311>



ultimately, the environment and ensure  
reparation of the damage.

adversos sobre a vida marinha, ecologias  
costeiras e, em última análise, o meio  
ambiente, garantindo a reparação dos danos.

**KEYWORDS:**

Bunker convention; disaster management;  
ecological compensation; oil spill;  
reparation.

**KEYWORDS:**

Convenção Bunker; gestão de desastres;  
compensação ecológica; derramamento de  
óleo; reparação.

## 1. INTRODUCTION

One of the biggest crude oil spills occurred on the Brazilian coast in late August 2019. Through January 2020, more than 5300 tonnes of crude oil were collected in 11 Brazilian states, including Rio de Janeiro, Espírito Santo, and nine states in the northeast. Over 1000 settlements and 130 coastal municipalities were impacted along 4,400 kilometres (2700 miles)<sup>32</sup> of Brazilian coastline. Numerous other communities that were impacted remain unaccounted for.<sup>33</sup> This oil spill was considered one of the most extensive environmental disaster ever.<sup>34</sup> Several Brazilian cities and states kept comprehensive records of the collecting of oil debris in the later years.<sup>35</sup> Due to the large spill's contamination of ocean waters and the continental coast with oil, which spread across beaches and estuaries, it was impossible to fish for crustaceans and other vertebrates that were used by communities in these areas for their subsistence. This had an impact on the entire marine ecosystem. Artisanal fishermen were one of the many groups impacted by the tragedy and it caused a direct impact on their lives because, in addition to depending almost entirely on the sea for their survival, they had previously endured social injustice and vulnerability in their region.<sup>36</sup> An investigation was carried out by federal police, the Brazilian Navy concluded that the oil spill was caused by a ship Bouboulina having Greek-flag. Tankers were owned by Delta tankers, which were counted as culprit for the spill. Though they did not admit it and said that their tankers arrived without any oil spills. There was neither any fuel loss nor any loss of any part of their cargo.<sup>37</sup> Despite that conclusion, it might be claimed that the result is debatable and calls for more investigation.

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<sup>32</sup>Ledur Julia, Black Tide 2019. <https://www.reuters.com/graphics/BRAZIL-OILSPILL/0100B4ST2L9/index.html> (accessed on- 30th July, 2023).

<sup>33</sup> Boletins Epidemiológicos. Ministério da Saúde (MS). Available online: <https://www.gov.br/saude/pt-br/centrais-de-conteudo/publicacoes/boletins/epidemiologicos> (accessed on 28th June 2023).

<sup>34</sup> Disner Rodrigo Geonildo, Torres Mariana. Revista Brasileira de Gestão Ambiental e Sustentabilidade (2020): 7(15): 241-255. ISSN 2359-141.

<sup>35</sup> Após Três Anos, Praias do Nordeste Voltam a Relatar Manchas de óleo. Available online: <https://noticias.uol.com.br/ultimas-noticias/agencia-estado/2022/09/07/apos-3-anos-praias-no-nordeste-voltam-a-relatar-manchas-de-oleo.htm> (accessed on 9th June 2023).

<sup>36</sup> Santos, M.O.S.; Santos, C.P.S.; Alves, M.J.C.F.; Gonçalves, J.E.; Gurgel, I.G.D. Oil in Northeast Brazil: Mapping conflicts and impacts of the largest disaster on the country's coast. AABC 2022, 94, e20220014. Available online: <https://www.scielo.br/j/aabc/a/3tqYWyBdfRj3HRsstJqnScc/?format=pdf&lang=en> (accessed on 9th June 2023).

<sup>37</sup> Ledur Julia, Black Tide 2019. <https://www.reuters.com/graphics/BRAZIL-OILSPILL/0100B4ST2L9/index.html> (accessed on- 30th July, 2023).

In addition to further inquiry and appropriate punishment of those involved, it is crucial to take into account alternative scientific hypotheses regarding the source of the oil.<sup>38</sup> As there may be an unknown amount of oil submerged in marine and estuary waters, this will allow reimbursement of public expenses, restoration activities, and to keep constant watch for the harm and hazards posed to health, the environment, and socioeconomics. These undiscovered oil reserves could become visible and pose a persistent danger to ecosystems and human life.<sup>39</sup> Due to its position, length, regular ship traffic on the route to Africa and Europe, and incentives for oil exploration and production, the Brazilian coastline is currently experiencing this issue. Brazil is one of the nation's most vulnerable to the economic and environmental effects of this energy matrix's pollution because of these factors.<sup>40</sup> In this tragedy, we saw inertia and a lack of governmental involvement in preventing the oil spill's harm; as a result, whose actions took 30 days to be initiated by the federal government, the socioeconomic effects of the spill were amplified and the likelihood of developing methods to deal with it was reduced.<sup>41</sup> Through the deconstruction of public policies that establish systems for environmental protection and health, the Bolsonaro (non)government has established a backdrop for the formation of necro politics<sup>42</sup>. The absence of these policies has encouraged environmental racism and injustices against those impacted by the tragedy, particularly the artisanal fishing population, which is primarily made up of Black and North easterner people.<sup>43</sup> Conflicts and environmental injustices have been happening in these regions, and exploitation is becoming more prevalent. In addition to a lack of socio-health state infrastructure and a lack of political and organisational strength to respond

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<sup>38</sup> Soares M.O., Teixeira R. A. e. a. Bezerra, S. Rossi, T. Tavares, and R.M. Cavalcante Brazil Oil spill response: Time for Coordination. Available online: <https://www.science.org/doi/10.1126/science.aaz9993> (accessed on 30th July, 2023).

<sup>39</sup> Barros, S.; Medeiros, A.; Gomes, E.G. Conflitos Socioambientais e Violações de Direitos Humanos em Comunidades Tradicionais Pesqueiras No Brasil: Relatório; CPP-Conselho Pastoral dos Pescadores: Olinda, Brasil, 2021; Available online: <http://www.cppnacional.org.br/publicacao/relat%C3%B3rio-dos-conflitos-socioambientais-e-viola%C3%A7%C3%B5es-de-direitos-humanos%20em%20comunidades> (accessed on 28 June 2023).

<sup>40</sup> Silva, D.A.; Schiavetti, A.; Malhado, A.C.M.; Ferreira, B.; Sousa, C.V.P.; Vieira, F.P.; Pinto, F.R.; Souza, G.B.G.; Olavo, G.; Santos, F.R.; et al. Oil Spill and Socioeconomic Vulnerability in Marine Protected Areas. *Front. Mar. Sci.* 2022, 9, 1–13.

<sup>41</sup> Soares, M.O.; Teixeira, C.E.P.; Bezerra, L.E.A.; Rabelo, E.F.; Castro, I.B.; Cavalcante, R.M. The most extensive oil spill registered in tropical oceans (Brazil): The balance sheet of a disaster. *Environ. Sci. Pollut. Res.* 2020, 29, 19869–19877.

<sup>42</sup> Mbembe, A. *Necropolítica: Biopoder, Soberania, Estado de Exceção, Política da Morte*; Faces da História: São Paulo, Brazil, 2018.

<sup>43</sup> Araújo, M.E.; Ramalho, C.W.N.; de Melo, P.W. Pescadores artesanais, consumidores e meio ambiente: Consequências imediatas do vazamento de petróleo no Estado de Pernambuco, Nordeste do Brasil. *Cad. Saúde Pública* 2020, 36, e00230319.

to the social metabolism of the globalised economy, protective regulatory measures for disadvantaged groups are becoming more flexible.<sup>44</sup> In the face of these territorial realignments, catastrophes, and environmental crimes, these communities find it challenging to get back on their feet on their own, increasing their vulnerability and provoking tensions. These conflicts, in turn, are identified by social groupings' divergent viewpoints on how to use territory and shared resources that are prompted by an intricate web of social and technical causes. These causes result from processes of social exclusion and the asymmetrical use of common resources like water and ecosystems (coast, mangroves, and countryside) that arise from the divergence of use of a given region and/or territory.<sup>45</sup> Therefore, it is essential to look into the specifics of how people and the environment intersect and how that affects how they live, especially in communities where there is an intrinsic connection to nature.

This research may assist in understanding the importance and need of prevention of such incidents in the first place and reparation in the aftermath of these type of incidents. The basic principle for respecting life and nature irrespective of existing economic and political model must be ensured at all times. This article analyses the probabilities which can be resorted to while ensuring reparation of damage done to environment and economy. Consequently, the article comes up with certain workable solutions with regard to damages.

## 2. LEGAL MATERIAL AND METHOD

The International Maritime Organization is the specialised agency of the United Nations tasked to oversee shipping safety and security as well as mitigating ship-related marine and atmospheric pollution. The activity of IMO aids the United Nations Sustainable Development Goals.<sup>46</sup> International Maritime Organization is an international body which sets standards for the safety, security, and environmental performance of international shipping and is a specialized agency of the United Nations. Its primary duty is to provide a just and efficient regulatory framework for the shipping sector that is widely embraced and put into effect. Its

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<sup>44</sup> Junges, J.R.; Barbiani, R. Interfaces entre território, ambiente e saúde na atenção primária: Uma leitura bioética. *Rev. Bioét.* 2013, 21, 207–217.

<sup>45</sup> Acselrad, H.; Herculano, S.S.; Pádua, J.A. *Justiça Ambiental e Cidadania*; Relume Dumará: Rio de Janeiro, Brasil, 2019; p. 303.

<sup>46</sup> IMO “World Maritime Theme 2024: Navigating the Future: Safety First” 2023. Available online: <https://www.imo.org> (Accessed on 30<sup>th</sup> July, 2023).



purpose is to level the playing field so that ship operators cannot simply cut costs and compromise on safety, security, and environmental performance in order to solve their financial problems.

In addition to the IMO, there are other legal frameworks that concentrate on the harm caused by oil pollution. The pertinent international regulation pertaining to pollution from oil transporting ships is the International Convention on Civil Liability for Oil Pollution Damage (CLC)<sup>47</sup>; the Civil Liability Convention was created to make sure that those who experience oil pollution harm as a result of maritime accidents involving oil-carrying ships can receive adequate compensation. This convention imposes a strict liability on the ships carrying oil. The owner carries a duty to prove if there was any exception. However, they may limit culpability for any one occurrence unless the owner has been found to have genuine negligence.<sup>48</sup>

The ships covered in this convention are required to have an insurance cover and financial securities which would be equal to the liability of the owner of the ship for one accident. It applies to all vessels carrying oil in actual but not to the warships and other state owned or operated ships used for non-commercial services.<sup>49</sup>

The responsibility and jurisdiction provisions of the Convention, however, apply to ships owned by a State and operated for commercial purposes.<sup>50</sup> Such ships are merely exempt in that they are not required to carry insurance. Instead, they must carry a certificate confirming that the ship's obligation under the Convention is covered, which was given by the relevant authority of the State of their registry.<sup>51</sup>

Article 12 of the International Convention on Civil Liability for Oil Pollution Damage, 1992 covers pollution damages brought on by recurrent oil spills that occur on a State Party's territory, including its territorial sea. It applies to vessels, typically loaded tankers, that carry

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<sup>47</sup> Adoption: 29 November 1969; Entry into force: 19 June 1975; Being replaced by 1992 Protocol: Adoption: 27 November 1992; Entry into force: 30 May 1996

<sup>48</sup> IMO "International Convention on Civil Liability for Oil Pollution Damage (CLC) Article-VII: Available online: [https://www.imo.org/en/About/Conventions/Pages/International-Convention-on-Civil-Liability-for-Oil-Pollution-Damage-\(CLC\).aspx](https://www.imo.org/en/About/Conventions/Pages/International-Convention-on-Civil-Liability-for-Oil-Pollution-Damage-(CLC).aspx) (accessed on: 30<sup>th</sup> July, 2023).

<sup>49</sup> IMO "International Convention on Civil Liability for Oil Pollution Damage (CLC): Available online: [https://www.imo.org/en/About/Conventions/Pages/International-Convention-on-Civil-Liability-for-Oil-Pollution-Damage-\(CLC\).aspx](https://www.imo.org/en/About/Conventions/Pages/International-Convention-on-Civil-Liability-for-Oil-Pollution-Damage-(CLC).aspx) (accessed on: 30<sup>th</sup> July, 2023).

<sup>50</sup> International Oil Pollution Compensation Funds, Liability and Compensation for Oil Pollution and Damage 2018. Available online: [https://iopcfunds.org/wp-content/uploads/2018/06/Text-of-Conventions\\_e.pdf](https://iopcfunds.org/wp-content/uploads/2018/06/Text-of-Conventions_e.pdf) (accessed on 30<sup>th</sup> July, 2023),

<sup>51</sup> International Oil Pollution Compensation Funds, Liability and Compensation for Oil Pollution and Damage 2018. See Article XI of CLC. Available online: [https://iopcfunds.org/wp-content/uploads/2018/06/Text-of-Conventions\\_e.pdf](https://iopcfunds.org/wp-content/uploads/2018/06/Text-of-Conventions_e.pdf) (accessed on 30<sup>th</sup> July, 2023),



oil in bulk as cargo. It is also not possible to recoup costs when preventive measures are so effective that no actual leak occurs for spills from tankers that are in their ballast or from other ships than tankers. If the incident happened as a result of the shipowner's personal negligence, the owner cannot minimise liability.<sup>52</sup>

The exclusive economic zone (EEZ) or comparable area of a State Party, as defined by the 1992 protocol, is now included in the scope of the Convention. The Protocol continues to cover pollution harm, but the amount of compensation for environmental damage is now only restricted to the costs associated with taking reasonable steps to restore the contaminated environment. Additionally, it permits the reimbursement of costs for preventive actions even in the absence of an oil leak, provided that there was a grave and immediate threat of polluting damage.<sup>53</sup>

The International Convention on Civil Liability for Bunker Oil Pollution Damage (BUNKER) is another international instrument that covers such situations. This Convention was adopted by International Maritime Organization (IMO) in March, 2001. The Convention was created to make sure that those who suffer harm due to oil leaks when it is being used as fuel in ship bunkers can receive adequate, fast, and efficient compensation.<sup>54</sup> Damage that occurs on the territory, including the territorial sea, and in the exclusive economic zones of States Parties is covered by the Convention. The bunkers convention offers a standalone instrument that simply covers pollution harm. The following are included under the definition of "pollution damage": (a) loss or damage brought on by contamination outside the ship as a result of the escape or discharge of bunker oil from the ship, wherever such escape or discharge may occur; provided, however, that compensation for environmental damage other than a loss of profit resulting from such damage shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken; and (b) costs of preventive measures and additional loss or damage. The International treaty on Civil Liability for Oil Pollution Damage,

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<sup>52</sup> IOPC Funds, The 1992 Civil Liability Convention, 2023. Available online: <https://iopcfunds.org/about-us/legal-framework/1992-civil-liability-convention/#> (Accessed on: 29<sup>th</sup> July, 2023).

<sup>53</sup> Admiralty and Maritime Law Guide: International Conventions, Available online: <http://www.admiraltylawguide.com/conven/protocivilpol1992.html> (Accessed on: 29<sup>th</sup> July, 2023).

<sup>54</sup> Zhu, L. (2007). International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 — Liability and Insurance Aspects. In: Basedow, J., Magnus, U. (eds) Pollution of the Sea — Prevention and Compensation. Hamburg Studies on Maritime Affairs, vol 10. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-540-73396-6\\_13](https://doi.org/10.1007/978-3-540-73396-6_13). Available online: [https://link.springer.com/chapter/10.1007/978-3-540-73396-6\\_13#citeas](https://link.springer.com/chapter/10.1007/978-3-540-73396-6_13#citeas) (Accessed on: 31<sup>st</sup> July, 2023).

1969, served as the inspiration for this treaty. As with that convention, the bunkers convention places great emphasis on the registered owner of a vessel maintaining mandatory insurance coverage.<sup>55</sup>

Another key provision is the requirement for direct action - this would allow a claim for compensation for pollution damage to be brought directly against an insurer. The Convention requires ships over 1,000 gross tonnage to maintain insurance or other financial security, such as the guarantee of a bank or similar financial institution, to cover the liability of the registered owner for pollution damage in an amount equal to the limits of liability under the applicable national or international limitation regime, but in all cases, not exceeding an amount calculated in accordance with the Convention on Limitation of Liability for Maritime Claims, 1976, as amended.<sup>56</sup> The International Convention Relating to the Limitation of the Liability of Owners of Seagoing Ships, which was signed in Brussels in 1957 and went into effect in 1968<sup>57</sup> was replaced by the Convention on Limitation of Liability for Maritime Claims (LLMC)<sup>58</sup>. The limit of liability for claims covered by the 1976 Convention has been increased significantly, in some situations by up to 250–300%. There are limits for two categories of claims: property claims (such as harm to other ships, property, or port infrastructure), and claims for loss of life or bodily injury. The Convention establishes a system of liability limitation that is essentially impenetrable.<sup>59</sup> The liability of shipowners and salvors may be limited, unless "it is proved that the loss resulted from his personal act or omission, committed with the intent to cause such a loss, or recklessly and with knowledge that such loss would probably result" The Protocol establishes a "tacit acceptance" method for updating these values as well as an increase in the amount of compensation payable in the case of an occurrence.

This brings up the question of the damages' dollar value and whether any funds exist from which the money may be easily disbursed. An international fund has been established for

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<sup>55</sup> Griggs P. 2001, International Convention on Civil Liability for Bunker Oil Pollution Damage. Available online: <https://www.bmla.org.uk/> (accessed on: 31<sup>st</sup> July, 2023).

<sup>56</sup> TSO. Available online: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/235987/8489.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/235987/8489.pdf) (Accessed on 31<sup>st</sup> July, 2023).

<sup>57</sup> IMO. 2001, Available online: [https://www.imo.org/en/About/Conventions/Pages/International-Convention-on-Civil-Liability-for-Bunker-Oil-Pollution-Damage-\(BUNKER\).aspx](https://www.imo.org/en/About/Conventions/Pages/International-Convention-on-Civil-Liability-for-Bunker-Oil-Pollution-Damage-(BUNKER).aspx) (Accessed on: 31<sup>st</sup> July, 2023).

<sup>58</sup> Adoption: 19 November 1976; Entry into force: 1 December 1986; Protocol of 1996: Adoption: 2 May 1996; Entry into force: 13 May 2004.

<sup>59</sup> Tsimplis, M. N. The Bunker Pollution Convention 2001: Completing and harmonizing the liability regime for oil pollution from ships? *Lloyd's Maritime & Commercial Law Quarterly*, pt-1, 83-100.

this purpose. The International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND)<sup>60</sup>. Although the 1969 Civil Liability Convention established a good method for assuring the payment of compensation for oil pollution damage, it did not deal properly with all the legal, financial and other concerns presented during the Conference adopting the CLC Convention. The 1969 Brussels Conference considered a compromise proposal to establish an international fund, to be subscribed to by the cargo interests, which would be available for the dual purpose of, on the one hand, relieving the shipowner of the burden by the requirements of the new convention and, on the other hand, providing additional compensation to the victims of pollution damage in cases where compensation under the 1969 Civil Liability Convention was either inadequate or unobtainable.<sup>61</sup>

The aims of the Fund Convention are:

- To provide compensation for pollution harm to the extent that the protection offered by the 1969 Civil Liability Convention is inadequate.
- To grant relief to ship-owners in respect of the additional financial burden imposed on them by the 1969 Civil Liability Convention, such relief being subject to requirements designed to maintain compliance with safety at sea and other conventions.
- To give implementation to the associated purposes set out in the Convention.

The Fund Convention is under an obligation to pay compensation to States and people who suffer pollution damage, if such individuals are unable to get compensation from the owner of the ship from which the oil escaped or if the compensation due from such owner does not seem enough to cover the damage suffered. Under the Fund Convention, victims of oil pollution damage may be compensated beyond the level of the ship owner's obligation. However, the Fund's obligations are constrained. Where, however, there is no ship-owner liable or the ship-

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<sup>60</sup> Adoption: 18 December 1971; Entry into force: 16 October 1978; superseded by 1992 Protocol: Adoption: 27 November 1992; Entry into force: 30 May 1996

<sup>61</sup>International Convention on Establishment of an International Fund For Compensation For Oil Pollution Damage (FUND), Available online: [https://www.imo.org/en/About/Conventions/Pages/International-Convention-on-the-Establishment-of-an-International-Fund-for-Compensation-for-Oil-Pollution-Damage-\(FUND\).aspx](https://www.imo.org/en/About/Conventions/Pages/International-Convention-on-the-Establishment-of-an-International-Fund-for-Compensation-for-Oil-Pollution-Damage-(FUND).aspx) (Accessed on 31<sup>st</sup> July, 2023).

owner liable is unable to meet their duty, the Fund will be compelled to pay the total sum of compensation owed. Under certain conditions, the Fund's maximum liability may grow.<sup>62</sup>

Other than some exceptional circumstances FUND convention is obliged to compensate the victims of oil pollution damage. The Fund's obligation to pay compensation is confined to pollution damage sustained in the territories including the territorial sea of Contracting States. Additionally, the Fund is required to make restitution for actions committed by a Contracting State away from its borders. The Fund may also offer help to Contracting States that want to take action against pollution because they feel threatened by it or are already being impacted by it. This may take the shape of personnel, material, credit facilities or other aid. This convention is actually a supplementary to the civil liability convention. Civil liability convention and FUND conventions derived its impetus from the concern generated by Torrey Canyon disaster of 1967.<sup>63</sup>

The Fund is required to indemnify the ship-owner or his insurer for a portion of the ship-owner's liabilities under the liabilities Convention as part of its second primary role. If the owner intentionally causes harm or if the accident was at least largely caused by the ship failing to adhere to specific international standards, the Fund is not required to compensate the owner. The Convention includes provisions on how claims are handled, as well as rights, obligations, and jurisdiction.<sup>64</sup>

All individuals who obtain oil through sea in Contracting States, are required to make contributions to the Fund. A separate 1992 International Oil Pollution Compensation (IOPC) Fund, often known as the 1992 Fund, was created by the 1992 Protocol and is overseen by a Secretariat in London. At a diplomatic gathering held at the IMO Headquarters in London, the 2003 Protocol creating an International Oil Pollution Compensation Supplementary Fund was approved. The created Fund's goal is to provide a third level of compensation to the two levels of compensation already provided under the 1992 Civil Liability and Fund Conventions. All States Parties to the 1992 Fund Convention are eligible to participate in the Protocol, which is optional.

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<sup>62</sup> Jacobsson, M., & Trotz, N. (1986). The definition of pollution damages in the 1984 protocols to the 1969 civil liability convention and the 1971 fund convention. *Journal of Maritime Law and Commerce*, 17(4), 467-492.

<sup>63</sup> Kesterman, F., & Towle, E. L. (1973). Caribbean weighs impact of stepped-up oil industry activity. *Journal of Maritime Law and Commerce*, 4(3), 517-524.

<sup>64</sup> Bernard, S. R. (1997). The Civil Liability Convention and the International Compensation Fund Convention. *Ocean L. & Pol'y Series*, 1, 129.

Including the amount of compensation paid under the current CLC/Fund Convention, the total amount of compensation payable for any one occurrence will be capped at 750 million Special Drawing Rights (SDR). Damage in a Contracting State's territory, including its territorial sea, and in its exclusive economic zone will be covered by the extra fund. Any person who has received a total amount of oil exceeding 150,000 tonnes in any calendar year must make annual contributions to the Fund on behalf of each Contracting State. But for the purposes of the Protocol, each Contracting State must receive a minimum total of 1,000,000 tonnes of contributing oil.<sup>65</sup>

On the basis of estimates of expenditure (including administrative costs and payments to be made under the Fund as a result of claims) and income (including surplus funds from prior years, annual contributions, and any other income), the Assembly of the Supplementary Fund will determine the level of contributions. A fee is levied on the oil received by the member states. The Fund collected through this fee is the basic source of finance for this fund. Therefore, Fund acts on the objectives of Article 235, Paragraph 2 and 3 of the UN Convention on the Law of the sea. The purpose is to ensure the availability of quick and adequate compensation to the victims of oil pollution.<sup>66</sup>

The international instruments mentioned above forms the major legal instruments related to the oil spill disasters. The provisions seem to be in place exhaustively, but the problem arises when one tries to apply these to the fact-situation. The same has been done in the result and discussion section of this paper.

### 3. METHOD

This paper is primarily based on doctrinal method of research in which analysis of mainly the reparation of damages as a result of oil spill has been dealt with. The paper has referred to the relevant international instruments linked with the civil liability for oil pollution including the Bunker Convention. The legal instruments have been analysed through the lens

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<sup>65</sup> Bergesen, H. O., Parmann, G., & Thommessen, Ø. B. (2018). International Oil Pollution Compensation Funds (IOPC Funds). In *Year Book of International Co-operation on Environment and Development* (pp. 214-214). Routledge.

<sup>66</sup> IOPC Fund. Available online:[https://www.un.org/depts/los/general\\_assembly/contributions2004/IOPCFund2004.pdf](https://www.un.org/depts/los/general_assembly/contributions2004/IOPCFund2004.pdf) (Accessed on 31st July, 2023).

of the 2019 Brazilian oil spill. The problems arising out of the 2019 incident have been highlighted and certain workable solutions are proposed to deal with the same. The paper has also referred the secondary data available on internet including various reports about this incident and newspaper articles related to it. This paper has advocated the idea that the basic principles of law should not be derogated in any circumstances irrespective of the hardships the application of the principles may cause.

## 4. RESULTS AND DISCUSSION

### 4.1. PREVENTION OF OIL SPILL INCIDENTS

In October 2013, Brazil's National Oil Spill Contingency Plan came into effect. This lays forth general guidelines for spill response, including organisational structure and duties, with the goal of creating a collaborative framework to shorten response times for accidents with major environmental implications. According to the Plan, it is the responsibility of a review and monitoring panel made up of officials from the Brazilian Navy, National Oil Agency, and Federal Environmental Agency (IBAMA) to determine whether an occurrence is of national significance, in which case the NCP would be activated.

The MRCC Brazil is the operational contact point in charge of receiving, transmitting, and processing urgent information on events involving dangerous chemicals, including oil from ships; the individual ports serve as backup contact points.<sup>67</sup>

In the event of a leak, IBAMA often delegates the cleanup effort to the environmental agencies of the 18 coastal states or to Petrobras, the country's state-owned oil firm likewise it happened in 2019 spill incident. IBAMA felt the requirements to involve the other institutions to remove the oil in the beaches specially in the state of Rio Grande do Norte which were affected very badly. This oil spill was substantially greater than other previous records. The municipalities way of work showed their non-experience in the waste collection and management of oil waste in proper manner.<sup>68</sup>

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<sup>67</sup> Brazil. Available online: <https://www.itopf.org/knowledge-resources/countries-territories-regions/brazil/> (Accessed on- 31st July, 2023).

<sup>68</sup> Barbeiro, P. P., & Inojosa, F. C. (2022). Assessing the actions of the Brazilian Federal Government to respond to the 2019 mysterious oil spill: a perspective of the national environmental agency. *Anais da Academia Brasileira de Ciências*, 94, e20210320.

In the state of Rio de Janeiro clean-up falls to the local state environment agency: Fundacao Estadual de Engenharia do Meio Ambiente (FEEMA) while in the State of Sao Paulo this rests with the state agency; Companhia Estadual de Tecnologia de Saneamento Ambiental (CETESB). The other state departments are: Recife, CODEMA; Fortaleza, COMDEMA; Belo Horizonte, CETEC; Cuiba, CONDEMA; Sao Luiz, SERNAT; Maceio, CMA/SERPLAN; Salvador, CEPRAM; Curibata, SUREHMA; Florianopolis, FATMA; Brasilia, SEMA; Goiania, SEMAGO; Natal, CMA; Campo Grande, INAMB; Joao Pessoa, SUDEMA; Vitoria, DAASSEES; Amazonas, CODEAMA; Bahia, INEMA; and Porto Alegre, DMA. The area of jurisdiction of IBAMA and the coastal states extends to the 200-mile limit of Brazil's EEZ.<sup>69</sup>

Government's role had not been quite satisfactory in this reference. During the 2019 oil spill happening poor coordination of Brazilian Federal government with the military, non-governmental organizations, civil society states and Brazilian municipalities was observed. This lack of coordination and transparent guidelines could not make effective responses towards the happening. The Federal government disbanded the executive and support committee responsible for oil spill accidents. Consequently, this lack of leadership and delayed the governmental response towards the oil spill.<sup>70</sup>

## 4.2. APPLICATION OF LEGAL INSTRUMENTS TO THE PRESENT FACTS

"Thousands of barrels" of oil from the disaster has harmed Brazil, according to reports. Although the cause of the unusually large oil spill, which originated outside of Brazil, is still unknown, the Greek-flagged tanker NM Bouboulina, which is owned by Delta Tankers Ltd, is suspected.<sup>71</sup> Chemical connections with Venezuelan oil were discovered during investigations by the Brazilian Navy and Petrobras, but Venezuela is not necessarily to blame.<sup>72</sup> The state-run PDVSA, which is Venezuela's sole oil business, has not received any complaints of oil spills

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<sup>69</sup> Brazil. Available online: <https://www.itopf.org/knowledge-resources/countries-territories-regions/brazil/> (Accessed on- 31st July, 2023).

<sup>70</sup> Soares, M. D. O., Teixeira, C. E. P., Bezerra, L. E. A., Rossi, S., Tavares, T., & Cavalcante, R. M. (2020). Brazil oil spill response: Time for coordination. *Science*, 367(6474), 155-155.

<sup>71</sup> Santos, M.O.S.; Santos, C.P.S.; Alves, M.J.C.F.; Gonçalves, J.E.; Gurgel, I.G.D. Oil in Northeast Brazil: Mapping conflicts and impacts of the largest disaster on the country's coast. *AABC* 2022, 94, e20220014. Available online: <https://www.scielo.br/j/%20aabc/a/3tqYWvBdfRj3HRsstJqnScc/?lang=en> (accessed on 28th July 2023).

<sup>72</sup> Combate ao Óleo. Marinha do Brasil. Available online: <https://www.marinha.mil.br/combate-ao-oleo> (accessed on 28 June 2023).

near Brazil, according to the government, which also rejected culpability for the catastrophe.<sup>73</sup> The results of the chemical analyses also showed that the oil came from a single source. On beaches, a number of barrels have washed ashore. The Navy had questioned 30 vessels passing by the Brazilian coast from ten different nations before testing to see whether there had been any oil spills.<sup>74</sup>

The oil slicks have been difficult for the Brazilian government to map.<sup>75</sup> Because the oil is floating below the ocean's surface<sup>76</sup>, it is impossible to detect and anticipate, and floating oil barriers have little to no impact. Shipping is a genuinely global sector, and it can only function efficiently if the rules and standards are also agreed upon, adopted, and put into practise globally. Any plan for long-term, sustainable economic growth must include shipping. The shipping industry, civil society, and the Organization's Member States are already cooperating through IMO to ensure a continuous and strengthened contribution to a green economy and growth that is sustainable. One of IMO's top priorities for the upcoming years is the promotion of sustainable shipping and marine development.<sup>77</sup>

IMO is actively working towards the SDGs and the 2030 Agenda for Sustainable Development as a member of the United Nations family. In fact, the majority of the goals of the 2030 Agenda won't be achieved without a sustainable transport sector that supports international trade and advances the global economy. The Technical Cooperation Committee of the IMO has formally approved connections between the SDGs and the Organization's work providing technical support. While SDG 14—the objective for the oceans—is important to IMO, certain parts of the Organization's activities can be connected to each SDG separately.

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<sup>73</sup> Navio Grego Foi Responsável por Derramamento de Óleo no Litoral Brasileiro, Diz PF. Available online: <https://www.cnnbrasil.com.br/nacional/navio-grego-foi-responsavel-por-derramamento-de-oleo-no-litoral-brasileiro-diz-pf/> (accessed on 30th June 2023).

<sup>74</sup> Soares, M.O.; Teixeira, C.E.P.; Bezerra, L.E.A.; Rabelo, E.F.; Castro, I.B.; Cavalcante, R.M. The most extensive oil spill registered in tropical oceans (Brazil): The balance sheet of a disaster. *Environ. Sci. Pollut. Res.* 2020, 29, 19869–19877.

<sup>75</sup> Barros, S.; Medeiros, A.; Gomes, E.G. Conflitos Socioambientais e Violações de Direitos Humanos em Comunidades Tradicionais Pesqueiras No Brasil: Relatório; CPP-Conselho Pastoral dos Pescadores: Olinda, Brasil, 2021; Available online: <http://www.cppnacional.org.br/sites/default/files/publicacoes/Relat%C3%B3rio%20de%20Conflitos%20Socioambientais%20em%20Comunidades> (accessed on 28th June 2023).

<sup>76</sup> Mar de Luta: Movimentos Pesqueiros e Organizações Lançam Campanha Contra Petróleo No Nordeste. Available online: <https://intervenozes.org.br/mar-de-luta-movimentos-pesqueiros-e-organizacoes-lancam-campanha-contr-petroleo-no-nordeste/> (accessed on 29th June 2023).

<sup>77</sup> Mbembe, A. *Necropolítica: Biopoder, Soberania, Estado de Exceção, Política da Morte*; Faces da História: São Paulo, Brazil, 2018.



The whole concept of sustainable development is based upon development while ensuring the preservation of environment at the same time. The development which ignores the environment cannot sustain for a long duration. For this very reason, it becomes important that there must be a mechanism to provide for compensation, even in cases where after robust investigation, the real cause cannot be attributed too certain people or source of pollution remains unknown. This is because, uncertainty about the polluter cannot satisfy the sufferers or it cannot bring back the livelihood of the dependent people.

## 5. FINAL CONSIDERATIONS, ARGUMENTS AND SUGGESTIONS

As the mystery still continues regarding this 2019 oil spill, it has become difficult to genuinely put blame on any particular ship owner for the mishap. This takes us to a situation where it seems a dead end to think of applying any of the relevant international instruments. When the causing ship or source of the incident is not known, there can be no specific party which can be asked to maintain the status quo which was prior to the incident. The essentials for the damages and reparation demands a full inquiry into the cause of the spill, till that nothing concrete can be done. Even if one talks about the compensation fund and its applicability, the same cannot compensate the actual damage which has resulted from such huge incident. It cannot be denied that in present days, a proper investigation can truly identify the real cause of the incident. The required thing is the political will of the State, if the State is after the wrongdoers, the investigating agencies can find the real polluters with the help of the advanced technologies that are available at present times.

Even when it is assumed that the real polluters could not be identified, in such situation also, the State cannot deny the facts regarding the huge loss of environment and the people who were dependent of the existence of such environment. The fishermen, people earning due to tourism at those beaches and indulging in any occupation dependent upon such beaches cannot be left unanswered regarding their livelihood. The inhabitants of the affected areas have a right over those places and therefore it cannot be overlooked that they have genuine claims for it arising out of the right. 'Ubi jus ibi remedium' is a latin maxim which means where there is a right there is a remedy. The word 'Jus' means the legal authority to do or demand something, and the word 'remedium' means the right of action in a Court of law. This maxim is applicable

in the present oil spill incident. Also, when the damage is apparent and is undeniable, the remedial process becomes a mere formality. The strict application of legal documents should not be allowed to over shadow the actual things which needs to be done. The investigation must and should be completed as soon as possible so that consequently, damages can be claimed from the real polluters and provided to the genuine people who have suffered losses.

The authors argue that there are some contradictory things among the legal instruments and consistency of the objectives of IMO with Sustainable Development Goals:

First, Sustainability is a quite serious and sensitive issue. Shipping of oil itself is probably not sustainable, regardless of what there are any spills.

Second, the aims of FUND Convention are quite contradictory

On one hand, it may protect victims beyond what they would be compensated without it, while on the other hand, it lets shipping companies off the hook.

Still to deal with these kinds of situations two suggestions are proposed:

- The establishment of a fund on the lines of the proposed “loss and damage” fund in the United Nations Climate Change Conference COP27 which shall fund vulnerable countries affected adversely by the climate change. The world at present cannot afford to ignore the communities and people who are ruined due to the oil spill incidents. If the same are ignored, the Sustainable Development Goals can never be achieved.

- Till the establishment of any such fund, the State on whose soil or waters the damage occurs should take the full responsibility. This suggestion is based on the latin term ‘*parens patriae*’ which means ‘monarch or legal protector of the citizens unable to protect themselves.’ This can be extended to the affected communities while placing a responsibility on the State to provide them with their livelihoods and resources. Also, the principle of public trust doctrine which says that the state cannot hand over its trust of resources to private ownership when the interest of the public is involved and consequently, the State must keep the ownership for the interest of public. And if the resources get damage, the duty to repair them should lie on the State itself.

The research paper finds that the two most affected and vulnerable sectors have been: the accommodation sectors and food sector, the life and livelihood of those people dependant on the seafoods and the life of adjacent residents. It’s very important for tourism and food production and food security. Another important measurement is wide variations in indices

among different state regions, helplessness to fight the stains. An economy is strongly depending on the exploitation of coastal resources or by deficiencies of social factors.<sup>78</sup> Having talked about the above-mentioned suggestions, the liability of international bodies and the applicability of international instruments can never be denied as according to the present situation and keeping in mind the robust system that exists to deal with oil spill incidents the major hurdle in resolving the difficulties is the lack of political will. If the State authorities entrusted with the task of investigation work in the desired manner, the situation can immediately improve for the better. Efficiency in energy use, new technology, innovation, maritime education and training, maritime security, maritime traffic management, and the growth of the maritime infrastructure: the development and implementation of global standards covering these and other issues, through IMO, will underpin IMO's commitment to provide the framework of institutions required for a green and sustainable global maritime transportation system.

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<sup>78</sup> Câmara, S. F., Pinto, F. R., da Silva, F. R., de Oliveira Soares, M., & De Paula, T. M. (2021). Socioeconomic vulnerability of communities on the Brazilian coast to the largest oil spill (2019–2020) in tropical oceans. *Ocean & Coastal Management*, 202, 105506.

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