A CRITICAL ANALYSIS OF TRAIL SMELTER ARBITRATION AND ITS PRESENT-DAY CONTRIBUTION

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I. INTRODUCTION

The comprehensive and holistic understanding of environmental law is incomplete without studying the Trail Smelter Arbitration case. Known to most environmental law scholars as the grundnorm of modern international environmental law, it is historic in bringing forth the principle of “trans-boundary harm” to the foray of liability attribution in environmental cases.\(^1\) With the evolution of the role of States and increasing amount of pollution emitted from each activity a human undertakes and especially the industry, the evaluation of the trail smelter principle as a plausible theory has become increasingly important. While its contribution is evident in the inception of ILC’s “Draft Articles on Prevention of Trans-Boundary Harm from Hazardous Activities”\(^2\) as well as the Stockholm Declaration\(^3\), however, it is important to see how it has affected the evolution of present principle. This paper seeks to answer the two central questions associated with this topic, first, how did adoption of such an arbitral tribunal help evolve everlasting principles of environmental law and what are its sentinel principles and procedural attributes that can be adopted henceforth. Second, in today’s world especially within the context of sovereign states there are certain environmental law principles which apply

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\(^3\) Stockholm Declaration, A/RES/2994 (1972).
regardless of sovereignty and how does the trail smelter inform such universal principles. In pursuance of the same, the paper in Part II will discuss the factual background of the case. Part III evaluates the decision of the case, bringing to clarity the foundational ratio which an arbitration process brought to the fore, as well as the criticisms which have been levied against the same. In Part IV, the paper analyses how trail smelter is relevant to today in informing certain universal principles of environmental law which modern states have adopted regardless of their sovereignty. In Part V, the authors will present their concluding remarks.

II. BACKGROUND

Regarded as one of the Locus Classicus in the realm of international environmental law in matters concerning trans-boundary harm and extra-territorial pollution effect, the Trail Smelter case actually stemmed from a seemingly local issue between two towns regarding a smelting plant. In 1896, a smelter was established in the town of Trail which is situated in British Columbia, Canada by the Canadian Pacific Railroad Corporation. Subsequently, the smelter in 1905 got incorporated by the Canadian government as the Consolidated Mining and Smelting Company (hereinafter referred to as “the Company”). This was located just 11 miles away from the Canadian-American border on which lay the town of Northport, Washington, United States. The cause of action leading up to the dispute started from as early as 1896 and resurfaced from 1921 onwards. The main task of the smelter was to roast sulphur-bearing ores which emitted the harmful sulphur dioxide gas as a byproduct into the air. With the air drift facing downward of the valley, the sulphur dioxide gas would cross the boundary and enter into the lands of Washington which caused considerable damage to the agricultural lands and croplands. In the initial years owing to complaints the smelter installed “smoke easements” and was held not liable

6 Ibid.
7 Ibid.
8 Ibid.
under law of torts.\textsuperscript{10} The first complaint was brought by the Canadian farmers who witnessed bad harvest year after year due to the air pollution which had made the adjoining farmlands barren. However, owing to the installation of the smoke easement apparatus and lack of direct evidence connecting the emission of sulphur dioxide gas to damage of crops, the case was settled out of court.\textsuperscript{11} However, as the smelter grew in its operation the emission also grew considerably which crossed over to Washington leading to large scale destruction of agricultural land and other resources for the American citizens.\textsuperscript{12} They formed a group and pressurized the two governments to take this issue up at the international level.\textsuperscript{13} It did not directly relate to a dispute between two sovereign powers and was never arbitrated upon in international law. It was a dispute based on claims of alleged nuisance brought against a Canadian Company by American citizens. Owing to diplomatic pressure, the US and the Canada established an International Joint Commission and referred the dispute under Article 9 of the \textit{``Boundary Waters Treaty''}, 1909\textsuperscript{14} which stipulated proving recommendation based on investigation and not a decision per se.\textsuperscript{15} The Commission headed by Deal Miller and Dean Howes, both scientists, conducted field research and witness testimonies, along with analyzing documentary evidence.\textsuperscript{16} The resultant report of the Commission assessed the damage to be worth $350,000 until 1931.\textsuperscript{17} While Canada agreed to it, the US rejected the Report and subsequently the parties entered into a compromise to refer the dispute to a three member arbitral tribunal.\textsuperscript{18} Article III of the Compromis laid down the following issues which were to be discussed and decided upon by the Tribunal\textsuperscript{19}:

1. Whether from January 1, 1932, damage has been occurring by virtue of the Trail Smelter into Washington and what could be the indemnity for the same?

2. If damage is being caused, should Trail Smelter be prohibited from causing it and to what degree?

\textsuperscript{11} Ibid.
\textsuperscript{12} Ibid.
\textsuperscript{13} Ibid.
\textsuperscript{14} Ibid; Boundary Waters Treaty, 36 Stat. 2448, (1909).
\textsuperscript{15} Ibid.
\textsuperscript{16} Ibid.
\textsuperscript{17} Ibid.
\textsuperscript{18} Ibid.
\textsuperscript{19} Ibid.
3. If Trail Smelter is asked to refrain what are the future measures it should adopt?

4. What is the quantum of indemnity and compensation that is there to be paid?

III. ANALYSIS OF THE DECISION

The trail smelter dispute was decided in two parts by the Tribunal. The first decision came in 1935 (“the previous decision”) and the final decision came on 1941 (“the final decision”). The previous decision conclusively determined the first issue whereas gave temporary decisions for the second and third issue owing to lack of comprehensive data and research. As regard to the first issue, the Tribunal held that the Trail smelter had in fact caused damage from January 1, 1932 to October 1, 1937. In pursuance of the same the indemnity payable was $78,000 which was deemed to be the entirety of the compensation for the damage so occasioned by the smelter. However, the most sentinel part of this whole proceeding was decided by the Tribunal in its final decision when it determinatively answered issues 2 and 3. The trail smelter dispute is essentially one fought on the context of sovereignty. While Canada’s sovereignty entailed her to economically exploit the natural resources to the fullest extent within her country; the US had similar sovereignty rights to protect its own national territory from any harm or violation. The arbitral tribunal had to steer through these seemingly conflicting impacts of sovereignty of the two countries while balancing the proposition that industrial development could not be curtailed on the basis of protecting the agricultural sector but at the same time agriculture cannot be severely damaged to perpetuate industrialization. In both the decisions one of the central contestation which arose was with regard what was the exact ambit and nature of the law to be applied by the Tribunal. Article IV of the Compromis stipulated the Tribunal to follow and apply the “laws and practice which was followed by the US to determine the cognate questions”. The Tribunal had to also apply general international law all the while trying to determine a just result.

20 Ibid.
21 Ibid.
25 Supra note 5.
for both the parties.\(^{26}\) In response to such a controversy, the Tribunal saw that no international tribunal before this case had ever decided on a case concerning air pollution or any other type of pollution.\(^{27}\) The only precedent which was available were decisions of the US Supreme Courts which the Tribunal accepted as laying down a framework for international pollution law as no contrary rule to the ones established by the Supreme Court determining the “quasi-sovereign rights” of different States viz.-a-viz. each other was found in international law.\(^{28}\) Therefore, the Tribunal relied on decisions such as *Missouri v. State of Illinois*\(^ {29}\) and *State of New York v. New Jersey*,\(^ {30}\) all of which concerned one State’s action in polluting territories of another State. Though these cases stemmed from alleged water pollution, the Court had held that the severity of damage would determine whether the Court would take any action against a State at the behest of another. The Tribunal held that these decisions informed the Tribunal’s powers as well.\(^ {31}\) Most significantly, it relied on the decision of *State of Georgia v. Tennessee Copper Company*\(^ {32}\) which was a direct case of air pollution wherein Georgia sought to hold Tennessee liable for the smelters located therein. The Court had held that a suit can be brought by a State while exercising its quasi-sovereign rights which comprises of its demands that its territories not be polluted and its lands and crops should not be destroyed.\(^ {33}\)

Thus, the tribunal by accepting this body of cases propounded the landmark ratio in the field of international environmental law by stating that in accordance with legitimate principles of international law along with legal jurisprudence subsisting in the US, no right subsists in a State which permits the State to utilize its territory in a manner which causes harm by way of fumes in or to the territory of another State or to the citizens residing therein when the damage is severe and the injury from such damage is established through conclusive evidence.\(^ {34}\) The Tribunal furthered the principle of polluter’s pay principle wherein it held Canada responsible for the pollution the smelter caused to the national territories of US and hence, liable to pay the
compensation.\textsuperscript{35} The award was based on the foundations of equity and finding a just solution for both parties.

However, the decision has been severely criticized on various grounds. The first criticism stems from the nature of the attribution of State responsibility. The crux of this dispute was a cause of action by the USA against a private company situated in the Canada. This is antithetical to international law as under the same only States can be held liable.\textsuperscript{36} The false attribution of the company’s conduct to the state of Canada especially when it had no control over the operations could be seen as problematic.\textsuperscript{37} Second, the computation of compensation was dependent on the specific claims of particular individuals and not on the basis of a State-to-State claim founded on damage to their sovereignty which would have made injury imputation much more difficult.\textsuperscript{38} Third, with regard to the procedure itself, the Tribunal did not establish a proper scientific correlation between the emissions and the particularized damage caused to the citizens of USA.\textsuperscript{39}

### IV. CONTRIBUTION OF TRAIL SMELTER TO MODERN INTERNATIONAL ENVIRONMENTAL LAW

#### 1. GENERAL PRINCIPLES OF INTERNATIONAL LAW

Trail smelter for the first time in international law established the principle of trans-national harm. Its conceptualization of the “no harm” principle relates to the duty of care that a States owes to another.\textsuperscript{40} Subsequently, this decision though not directly cited has become one of the touchstones on which international law cases and environmental law conventions have been developed on. In the advisory opinion of the Nuclear Weapons case, given by ICJ, it stated that it

\textsuperscript{35} Ibid.
\textsuperscript{40} Ellen Hey, Advanced Introduction to International Environmental Law Edgar Elgar Publishing Limited, (2016).
is a well established principle of international law that there exists a positive obligation on one State to control their activities so as to protect the environment of other States.\(^{41}\) In the Corfu Channel Case, this principle was used to establish that a State had a responsibility to not cause environmental damage to another as well as safeguard the environment of the sea, Antarctica and outer space.\(^{42}\) The Permanent Court of Arbitration extended this principle further to include that this operated in scenarios wherein two States contracted to work on a cooperative project.\(^{43}\) Subsequently in the Stockholm Declaration, the ratio is espoused as while each State has full freedom to exploit and manage their own resources and pursue their own individual environmental policies, they also have the responsibility to not cause environmental degradation to jurisdictions outside of their national boundaries.\(^{44}\) Principle 2 of the Rio Declaration is also modeled on similar line which gives free reign to the States to pursue their developmental policies but they should not be at the cost of another State’s environment.\(^{45}\)

2. **Sustainable Development**

The second field that the paper will examine is the field of sustainable development. The concept of sustainable development was famously propounded in the Gabcikovo-Nagymaros case which lay down that sustainable development meant the harmonious co-existence of economic development alongside environmental protection.\(^{46}\) The two primary documents which enshrine the principle of sustainable development as an international obligation are the Stockholm Declaration\(^{47}\) and the Rio Declaration\(^{48}\). While Principle 2 of the 1972 Declaration states that natural resources must be conserved for both present and future generation by way of effective management and preparation; Principle 8 concretizes the right to development- economic and social- that every individual has so as to improve their standard of life. Rio Declaration, in particular Articles 3, 4 and 7 establish the fundamental link between an individual’s right to

\(^{43}\) Award in the Arbitration regarding the Iron Rhine Railway (Kingdom of Belgium V. the Kingdom of the Netherlands), ICGJ 373 (PCA 2005).
\(^{44}\) Supra note 3, Principle 21.
\(^{47}\) Supra note 3.
\(^{48}\) Supra note 45.
environment as well as development. Article 7 imposes it upon the developed states to preserve the environment. Article 8 and 9 impose upon States the obligation to adopt sustainable practices and mechanisms while Article 12 clearly specifies that measures for environmental development should not unjustifiably restrict international trade. Thus, both these instruments showcase that the dual right of environment as well as economic development are anthropocentric in nature.\(^\text{49}\)

Though these two instruments were formulated after the trail smelter case was decided, the ratio of the dispute is clearly evident in the roots of both Stockholm and Rio Declaration. The point of sustainable development was well within the nature of the dispute and the decision of the tribunal in the Trail Smelter case.\(^\text{50}\) The decision to not shut down the smelter despite it causing considerable environmental damage was founded on the idea of sustainable development which comprises of the dual-right of environment and development.\(^\text{51}\) At the time of the dispute, the Trail smelter was the biggest employer in British Columbia contributed heavily to the GDP of the Canadian treasury.\(^\text{52}\) It was also the best-equipped and upto-date industry in all of North America.\(^\text{53}\) Thus, the closing down would have had a detrimental effect on the entire economy and the citizens. However, the Tribunal was also aware of the environmental damage that was being caused owing to its operations.\(^\text{54}\) Hence, the tribunal in the true spirit of sustainable development of balancing interests articulated the threshold that the operations could continue as long as it was below the injurious level and did not cause excessive damage to the property.\(^\text{55}\) In pursuance of the same, the arbitral decision was also one of the first decisions in international environmental law which laid down the jurisprudence of environmental monitoring by setting up a regime for controlling the pollution which needed to be observed by the smelter on a continuous basis.\(^\text{56}\) This shows that till date the international community is trying to find a


\(^{53}\)Ibid.

\(^{54}\)Supra note 51.

\(^{55}\)Supra note 50.

\(^{56}\)Supra note 49.
balance between protecting State sovereignty as well as safeguarding the environment much like it was the crucial question for the trail smelter arbitral panel. Therefore, it has been established through trail smelter that a State’s free exercise of sovereignty is qualified by the principle of prohibition of trans-boundary harm.\textsuperscript{57}

3. **Precautionary Principle and Climate Change Regime**

The third environmental law principle, to which the trail smelter decision is of contemporary relevance and can be used to make the principle’s application more effective, is the precautionary principle. Before the advancement of this principle, it was common practice that States would undertake a reactionary approach i.e., the States would enact regulations only after an environmental tragedy or harm had occurred.\textsuperscript{58} The compensatory regime was founded on the chasm between environmental regulation and the occurrence of harm which was primarily perpetuated due to lack of scientific evidence leading to uncertainties.\textsuperscript{59} The defense of scientific uncertainty became a boilerplate excuse for States who did not want any hindrance on their economic systems stemming from environmental obligations.\textsuperscript{60} The precautionary principle developed in response to such defense. The Rio Declaration in Article 15 articulated principle as being that no State can cite scientific uncertainty as a reason for not effecting environmental protection measures wherein there is a severe threat of environmental degradation. Hence, scientific legitimacy of the occurrence of harm is not a pre-condition for effecting measures to prevent the same.\textsuperscript{61} However, this principle has been criticized as bringing in over-regularization which has potential for excessive interference into free trade.\textsuperscript{62} It also possibly imposes huge monetary burden on the State and restricts innovation.\textsuperscript{63} Thus there is a constant scuffle between under-regulation of environmental harms and overregulation which could inflict substantial cost

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\textsuperscript{57} Phoebe Okowa, The Legacy of Trail Smelter in the Field of Transboundary Air Pollution, Cambridge University Press, edn. in Rebecca Baprtrise & Russell Miller, (2006).


\textsuperscript{59} Ibid.

\textsuperscript{60} Ibid.


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even for a possibly distant harm. It is in this context that the Decision has a bearing. While
deciding on whether or not there was harm significant enough to trigger a “no-harm” obligation,
the arbitral panel went through a host of inquiry. Most significantly, the two parties since the
Joint Commission conducted thorough investigations and came together for gathering evidence
and supporting tribunal through information assessment.64 The joint effort of investigation and
its subsequent reliance by the Tribunal seems to suggest that the Panel supports the idea that the
States who are party to the trans-boundary harm dispute have a responsibility to gather
information to help the Tribunal in making a proper scientific finding so as to determine the
harm done in furtherance of the precautionary principle.65 More significantly, scholars have
proposed that the decision making structure of Trail Smelter in itself is useful for resolving the
flaws in the precautionary principle. In Trail Smelter with regard to determination of harm and
framework/guidelines to control thereof was first subject to a temporary regime and only after
undertaking extensive research and scientific analysis did the Tribunal in its final decision
impose a permanent regime.66 This approach has been termed as “semi-precautionary”.67 Thus,
this dynamic and two-step regulatory regime is seen as a possible point of confluence between
the opponents and proponents of precautionary principle as through this there will be less
stringent temporary regime in place to regulate possible future environmental degradation until
scientific legitimacy can be obtained to fine-tune the regulations proportionately to the possible
harm.68

In terms of the nature of arbitration that was adopted in Trail Smelter and whether its processes
has a bearing on the present resolution or treaty systems of environmental law, it is important to
look at UNFCCC.69 One of the most important contributions of the trail smelter resolution itself
as discussed above was the flexibility it adopted in the application of law. For the tribunal they
applied the jurisprudence of realism wherein they did not consider the body of environmental
law as a static corpus, but would see these rules as means to reach a social end and fluid to attain

64 Supra note 5.
65 Rebecca M. Bratspies, Trail Smelter’s (Semi) Precautionary Legacy, CAMBRIDGE UNIVERSITY PRESS, edn. in
66 Supra note 5.
67 Supra note 65.
68 Ibid.
certain goals especially with regard to how to interpret such scientific uncertainties in the case.\textsuperscript{70} It is commented that the trail smelter dispute laid down the foundation stone for future conventions and treaties to adopt a framework mechanism which accommodates for fluidity most importantly for the UNFCCC to come about.\textsuperscript{71} The Tribunal took into account new scientific developments occurring while the dispute was sub-judice to give its decisions, and this inclusion of new scientific developments as and when it happens is important for UNFCCC because it deals with the dynamic subject global climate change.\textsuperscript{72} The fact that the UNFCCC provides for a process-based mechanism which accounts for identification of newer technologies, scientific evaluations and the integration of the two has strong underpinnings of trail smelter arbitration which was the pioneer case in accommodating flexibility.\textsuperscript{73}

4. **MARITIME POLLUTION**

The fourth possible contribution of the trail smelter case is to the principles enunciated in the United Conventions on the Law of the Sea.\textsuperscript{74} The UNCLOS is the direct successor of the OILPOL 54\textsuperscript{75} and MARPOL\textsuperscript{76} which unified all the multilateral and specified treaties regarding the protection of marine environment. The fundamental part of the UNCLOS dealing with the environment is contained in Part XII. It outlines the basic obligation of each state such as the duty to build a framework for the reduction and prevention of marine pollution, cooperation in between various states as well as allied pollution such as land-based\textsuperscript{77} and atmospheric\textsuperscript{78} pollutants to the marine environment. Part XII also pins liability on the state under international law for not adhering to their obligations detailed herein.\textsuperscript{79} Although, the trail smelter decision did


\textsuperscript{74} The United Nations Convention on the Law of the Sea, 1833 U.N.TS. 397, 1982; hereinafter referred to as the UNCLOS.

\textsuperscript{75} International Convention for the Prevention of the Pollution of the Sea by Oil, 327 U.N.T.S. 3, 1954.


\textsuperscript{77} Supra note 74, Article. 207.

\textsuperscript{78} Ibid, Article. 212.

\textsuperscript{79} Ibid, Article 235.
not concern with water pollution neither did it utilize the principles of existing maritime law, however, the ratio of the case which has achieved the international law equivalent of “sic utere tuo” maxim informs the principles concretized in UNCLOS. One of the direct attributions can be seen in Article 56, which extends a State’s sovereignty until 200 nautical miles from its coast and all the biotic as well as abiotic resources contained therein (the exclusive economic zone). This can be seen as espousing the ratio of trail smelter, because by virtue of its sovereignty if any state pollutes the EEZ of another state due to which such living resources are hampered such as illegal dumping of hazardous waste etc. that state can bring a case against such polluting state for protection of the resources. The second such article is Article 194(2), which states that each State has the obligation to ensure that any activity carried on in their jurisdiction or under their control should not cause pollution or such pollution should not spread to the jurisdiction of another State. If such a duty is not carried out then under Part XV either the offending State needs to reach a settlement with the other or submit the dispute to the ITLOS. The establishment of an arbitral tribunal under Annexes VII and VIII is also reminiscent of the trail smelter dispute with regard to the choice of arbitration as an effective mode of dispute resolution. Where concrete guidelines are not affixed such as frameworks for land-based pollution onto the sea, the trail smelter decision is important as a general guideline of international law.

V. CONCLUSION

While Trail Smelter is the foundational stone of international environmental law, there have still been criticisms levied upon it especially in modern times when the nature of pollution and pollutants have become far more pervasive and complex to singularly be attributed to one particular activity or to a State boundary. However, as has been discussed in this paper, certain basic principles which apply to all States in this modern era of widespread environmental

81 Ibid.
82 International Tribunal for the Law of the Sea.
84 Supra note 80.
degradation such as sustainable development, precautionary principle etc. still has its base in the trail smelter decision and to the characteristics of the arbitration. The trail smelter decision becomes especially important for developing countries like India who are still evolving contemporary environmental protection frameworks while at the same time undertaking large scale economic and industrial production. Even though sovereignty is still a pressing issue worldview despite globalization, humans have a duty towards the environment that nurtures them which transcends territorial limits, which was the central philosophy of the trail smelter dispute. The author believes that the trail smelter case hasn’t completely lost its mark and there is much more relevance to be found in its processes and its decision.