

## **A Study on International Forum of the United Nations Environment Programme (UNEP) in Promoting the International Financial Mechanisms During Negotiations of the Montreal Protocol**

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**Abstract:** Montreal Protocol is one of the successful Multilateral Environmental Agreements (MEAs). The protocol managed to seek international environmental cooperation among almost all of states in the world. All of these states have already agreed to ratify the Montreal Protocol. The Montreal Protocol has been enacted for the protection of the ozone layer by taking precautionary measures to control world emissions of substances that deplete the ozone layer. Some of the international environmental governance scholars suggested that international forum might influence in the negotiation of creating MEAs by promoting international financial mechanism. Moreover the existence of the international forum would lead to international co-operations in order to achieve sustainable development. This would influence in the negotiations of creating MEAs, which include Montreal Protocol. Therefore, the primary purpose of this study is to explain the influence of international forum by promoting international financial mechanism in the international environmental governance with regards of the Montreal Protocol's early negotiations and the relations of the interstates participation response. This study adopted the qualitative approach which is based on the meetings' proceeding reports of the Montreal Protocol. This study has also identified that the international forum of the United Nations Environment Programme (UNEP) had played an essential role as a strongly environmental forum by promoting international financial mechanism in order to influence the Montreal Protocol's early negotiations and the responds of the interstates participations. Finally, the preliminary findings indicate that UNEP as a international forum which promoting the international financial mechanism in the negotiations of the Montreal Protocol was important in terms of to lead for further development and expansion of rules on financial assistance and technology transfer in order to seek international environmental cooperation for achieving environmental protection goals.

**Key words:** International governance, financial mechanisms, negotiations, Montreal Protocol

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### **INTRODUCTION**

International governance provides the main framework for the international cooperation among the international community in order to safeguard Mother

Nature at the national, regional and international levels. At each level the responsibility turns out to be increasingly multifarious as new protagonists and concerns are drawn into the international governance process. It started with 2 countries Great Britain and

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France, which negotiated for the Convention on Fisheries Conservations 1867 and up to today, we have witnessed more than 150 countries negotiate for the Kyoto Protocol to the United Nations Framework Convention on Climate Change 1997 (Breitmeier, 1997; Sands, 2003).

These two above-mentioned environmental agreements indicate that the international governance provides the same function, which is to ensure a framework that is able to provide an assortment of members of the international community, which may collaborate and cooperate. This collaboration and cooperation will create standard conduct and subsequently reconcile differences.

**International governance and environmental protection:**

A number of players are involved in the international legal order that deals with environmental issues, predominantly in the negotiations for multilateral environmental agreements (MEAs). Besides country representatives, those playing an essential role, are observers to the Montreal Protocol on Substances that Deplete the Ozone layer 1987 and the Kyoto Protocol to the United Nations Framework Convention on Climate Change 1997 negotiations, who would identify international institutions and non-governmental players energetically involved in negotiations (Seaver, 1997; Barrett, 2003). International governance is described by this observable fact that the likely exclusion of the rights of individuals leaves it unique. There have been a number of explanations that discuss those situations. Countries are engaged because they have to deal with legal aspect. International institutions are involved due to their role established by countries to deal with specific environmental concerns. Meanwhile, a range of non-governmental players participates in the negotiations for the MEAs such as scientific community, business entities and international environmental civil societies (Harris, 2002).

Some of the international environmental governance scholars such as Breitmeier (1997), Seaver (1997), Harris (2002), Sands (2003) and Breitmeier *et al.* (2006) have suggested that international forums of international institutions might influence the negotiations for creating MEAs. Moreover, the existence of the international forum of international institutions would lead to international cooperation in order to achieve sustainable development and subsequently to protect and safeguard international environment.

**International institutions and environmental protection:**

The international institutions have taken a somewhat adhoc approach towards the setting up for the MEAs. In

the early days, MEAs did not generally develop eminent organizations to manage or supervise the implementation of those provisions of the MEAs. In 1945, after the Second World War, the number of international institutions had grown in the form of formal or informal acclimatising existing institutions bequeathed have authority in the field of environmental matters. Almost all international institutions currently are having some responsibility for the negotiations and implementation of MEAs. However, these international institutions are decentralised in nature, which can be categorised into 3 groups. These 3 groups are international institutions associated with the United Nations, regional institutions outside the United Nations' structure and institutions developed by international environmental laws (Breitmeier, 1997; Sands, 2003).

**United Nations (UN):** The UN Charter does not stipulate expressly that it has authority over environmental issues. According to Article, 1 (1), (2) and (3) of the UN Charter, these provisions have highlighted the roles of the UN, which comprise the preservation of international security and peace, the espousal of actions to reinforce international peace and the triumph of cooperation in solving international humanitarian, economic, cultural or social problems. Nevertheless, in the late 1960s, there was concern by the UN on the environmental issues. Under the United Nations General Assembly (UNGA) 1972, through resolution 2997, the United Nations Environment Programme (UNEP) was formed (Breitmeier, 1997; Sands, 2003).

**United Nations Environment Programme (UNEP):** The UNEP has played an important function in the emergence of MEAs. The UNEP, which is based in Nairobi, has the ultimate goal of promoting international environmental cooperation in order to protect international environment with emphasis on sustainable development. The UNEP has managed to successfully build international environmental cooperation for establishing several MEAs, which include the Vienna Convention 1985, the Montreal Protocol 1987, the Basel Convention 1989 and the Convention on Biological Diversity 1992. The UNEP is also endowed with secretariat roles to these MEAs (Breitmeier, 1997; Harris, 2002; Sands, 2003).

**Financial mechanisms and environmental protection:**

Financial mechanisms that related to the environmental protection have divided into 2 parts. The 1st part relates with the extent to which Overseas Development Assistance (ODA) given to bilaterally states (or collectively by a group of states) or by international

institutions is subject to compliance with international environmental law (Barrett, 2003). The 2nd part concerns to the body of international organizations and substantive law that has arisen out of the establishment and development of international mechanisms to provide financial assistance for international environmental goals (Sands, 2003). Both include the International Environmental Facility (GEF) and the Montreal Protocol Multilateral Fund on top of earlier mechanisms for instance the World Heritage Fund, the International Fund for Plant Genetic Resources and the Wetlands Fund (Sands, 2003). These financial mechanisms play important role in MEAs negotiations. In fact, these financial mechanisms highlight the growing connection between the development and submission of environmental regulations and standards and the stipulation of financial resources to guarantee the implementation, specifically by developing countries (Barrett, 2003; Sands, 2003).

**Scope of this study:** The success of the international environmental cooperation in the MEAs is based on the consensus agreement among member states. Hence, this study is looking into the ability of the UNEP as a international environmental institution in influencing the international environmental cooperation of the MEAs by focusing on one of the successful MEAs such as the Montreal Protocol 1987. The Montreal Protocol has been enacted for the protection of the ozone layer by taking precautionary measures to control world emissions of substances that deplete the ozone layer (Sands, 2003). Awareness of the existence of ozone layer i.e., O<sub>3</sub> at the stratosphere and threat of *chlorofluorocarbons* (CFCs) as ozone depletion substance increased radically in the early years of 1970s (Seaver, 1997; Breitmeier, 1997; Breitmeier *et al.*, 2006). Moreover, scientists as well as policy makers had made a lot of initiatives to capture international attention on the threat of CFCs towards the ozone layer. As a result, in the middle of the 1980s, ozone layer problems became a international concern (Breitmeier, 1997; Breitmeier *et al.*, 2006). Starting from this point, the international concern became the catalyst for the international environmental cooperation and gave birth to the Montreal Protocol 1987 (Barrett, 2003; Sands, 2003).

Therefore, this study concentrated on international institutions associated with the United Nations with focus on the United Nations Environment Programme (UNEP). Under the Montreal Protocol, this study has also acknowledged that the international forum of the United Nations Environment Programme (UNEP) had played an essential role as a strong environmental forum by promoting the international financial mechanisms in order

to influence the Montreal Protocol's early negotiations and the response of the interstates' participations and cooperation.

This study embarks on the following objectives:

- To identify and analyse the themes and sub-themes related to the influence of the international forum of the UNEP for promoting the international financial mechanisms in the early stage of negotiations that build up the international environmental cooperation in the Montreal Protocol.
- To explain the influence of the international forum of the UNEP for promoting the international financial mechanisms in the early stage of negotiations that build up the international environmental cooperation in the Montreal Protocol.

## MATERIALS AND METHODS

This study applied the qualitative set-up. In line with the qualitative approach, the Montreal Protocol has been employed as a case study in this study. Hence, this study was done by analysing some of the relevant meeting documents of the Montreal Protocol.

**Documents selection:** This study is intimately linked to the international environmental cooperation in the Montreal Protocol, the influence of interest approach and also the response of the member states. Therefore, the following documents have been selected as the main documents of this study. The documents are as follows:

- Meeting reports of The first session-adhoc working group of legal and technical experts for the preparation of a protocol on chlorofluorocarbons to vienna convention for the protection of the ozone layer' on 1-5 December 1986 at Geneva, Switzerland.
- Meeting reports of the second session-adhoc working group of legal and technical experts for the preparation of a protocol on chlorofluorocarbons to vienna convention for the protection of the ozone layer on 23-27 February 1987 at Vienna, Austria.
- Meeting reports of the first meeting-adhoc working group of legal and technical experts for the harmonization of data on production, imports and exports of substances that deplete the ozone layer on 9-11 March 1988 at Nairobi, Kenya.
- Meeting reports of the second meeting-adhoc working group of legal and technical experts for the harmonization of data on production, imports and exports of substances that deplete the ozone layer on 24-26 October 1988 at The Hague, Netherlands.

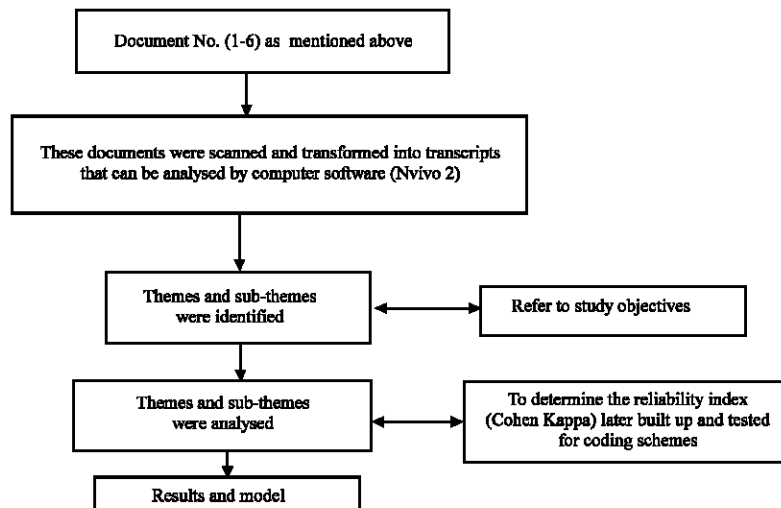


Fig. 1: Documents analysis process flow chart

- Meeting reports-‘Meeting of Parties’ (Montreal Protocol) on 2-5 May 1989 at Helsinki, Finland.
- Meeting reports of the first session-‘Open-Ended working group of the parties’ (Montreal Protocol) on 21-25 August 1989 at Nairobi, Kenya.

These above-said documents have been selected because they represent the early stage of negotiations of the Montreal Protocol. The first two documents represent negotiations in the making of Montreal Protocol itself, while the last four documents represent negotiations to persuade and attract more nations to become as members of the protocol.

**Documents analysis:** All the above-mentioned documents were analysed by using Nvivo 2 software. By using Nvivo two software, the researchers have built up and tested the coding schemes. This action was necessary in order to determine the reliability. According to Maxwell (2005), there are a few necessary steps in analysing documents by using the software. All the documents are identified and selected for the purpose of fulfilling the study objectives i.e., the above-mentioned documents. These documents are numbered 1-6. Later, these documents are scanned in order to transform them into transcripts that can be analysed by computer software (Nvivo 2). By using computer software (Nvivo 2), the researchers identified themes and sub-themes based on the above-mentioned selected documents, which are in line with the study objectives. Following that, researchers are required to determine the reliability of the coding schemes during the process of identifying themes and sub-themes by

using computer software (Nvivo 2). This determination of reliability is based on the reliability index of Cohen Kappa. This process is required to be repeated many times until the coding schemes manage to obtain the highest level of the reliability. Finally, these themes and sub-themes are built up by displaying these results in the form of a model. This process of documents analysis is laid down in Fig. 1.

## RESULTS AND DISCUSSION

Based on the documents analysis on the international forum of UNEP in the early negotiations of the Montreal Protocol, two main themes and eight sub-themes have been identified (Table 1 and Fig. 2). The themes are activities and committees, while the sub-themes are meetings, workshops, conferences, coordinating committees, secretariat, advisory panel, working groups and Governing Council.

**Activities:** When referring to the influence of the UNEP international forum in the negotiations of the Montreal Protocol, it is clear that the activities have played essential roles in the negotiations. This is highlighted in document no. 3 and 6, which indicate that activities that have been conducted by the international forum of UNEP have managed to obtain international attention.

The first session of the first meeting of the Open Ended Working Group of the Parties to the Montreal Protocol was held at UNEP headquarters in Nairobi from 21 to 25 August 1989 [Para 11, Document No. (6)].

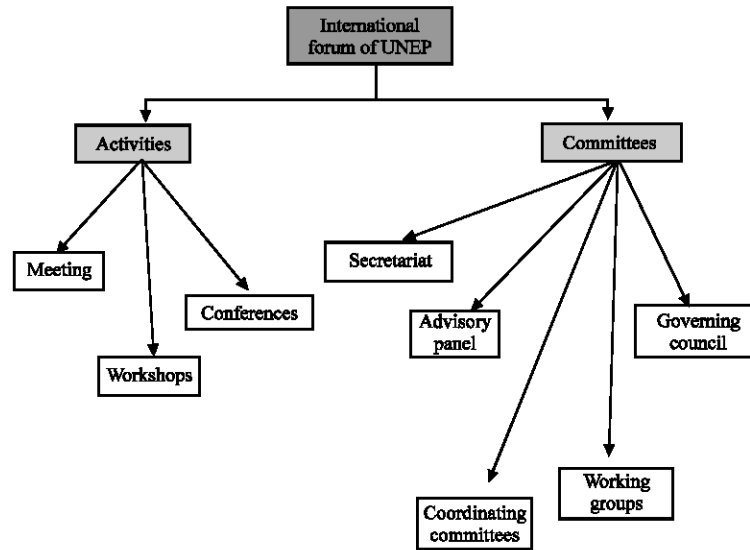


Fig. 2: Model of themes and sub-themes of documents analysis of the international forum of unep in the Montreal Protocol

Table 1: Themes and sub-themes of documents analysis of the international forum of UNEP in the montreal protocol

Themes	Sub-themes
Activities	Meetings, workshops, conferences
Committees	Coordinating committees, secretariat, advisory panel, working groups and governing council

The first meeting of the AdHoc Working Group of Legal and Technical Experts for the Harmonization of Data on Production, Imports and Exports of Substances that Deplete the Ozone Layer was held at UNEP headquarters in Nairobi from 9 to 11 March 1988 [Para 14, Document No. (3)].

**Activities/meetings:** This study has shown that activities that have been conducted by the international forum of the UNEP through meetings were also being considered as factors that influence states to participate in international environmental cooperation of the Montreal Protocol. This has been highlighted in documents as stated below:

A representative of the UNEP Secretariat, Mr. Peter Usher, informed delegates of the series of scientific and technical meetings and economic workshops that had been held by UNEP in order to provide a sound basis for discussions on a protocol by the Vienna Group [Para 60, Document No (1)].

As the Vienna Group did not conclude its work during the Meeting by elaborating a

protocol to the Vienna Convention on the control of chlorofluorocarbons, it requested UNEP to convene another meeting in order that its work might be completed [Para 204, Document No (2)].

**Activities/workshops:** Besides the meetings, which have been highlighted above, workshops have also been mentioned for consideration in order to influence the negotiations of the Montreal Protocol. This is highlighted in document no. (1).

Those of the 2 part UNEP workshop on the control of chlorofluorocarbons which reviewed all aspects of the production, emissions, use of CFCs and of current regulations for their control and, at its second part, compared different control strategies for the CFCs and other ozone modifying substances against an agreed set of criteria [Para 62, Document No (1)].

**Activities/conferences:** In addition, to the discussion under the main theme 'activities', which was based on document 3 and 5, member states during the negotiations always ensure that the Montreal Protocol must take into consideration the activities that have been conducted by the international forum of the UNEP in order to obtain the international cooperation through conferences.

Dr. Tolba drew attention to the documents prepared for the meeting, especially his Note "Harmonization of data on production, imports

and exports of substances controlled under the Montreal Protocol on Substances that Deplete the Ozone Layer and other outstanding issues arising under the resolutions of the Final Act of the Conference of Plenipotentiaries and under the Montreal Protocol [Para 20, Document No. (3)].

Initiatives to support activities in programmes (such as conferences) of international organizations (such as UNEP) and financing agencies that could contribute towards implementing the provisions of the Protocol [Para 352, Document No (5)].

**Committees:** The second main theme that has influenced the negotiations of the Montreal Protocol from the perspective of the UNEP international forum, it is also clear that the committees have played essential roles. This has been highlighted in document no. 6.

Several delegations expressed the need to make the trust fund a discrete fund that would be administered by UNEP. These delegations expressed a preference for UNEP because of the Organization's experience with the ozone issue and the belief that UNEP [Para 209, Document No. (6)].

**Committees/coordinating committees:** These committees also included the coordinating committees. These coordinating committees really help to influence states around the globe to join and ratify the Montreal Protocol. This is highlighted in document no. 1.

Mr. Usher said the UNEP Coordinating Committee on the Ozone Layer (CCOL) had met three times in the past year and had provided to the Vienna Group summaries of assessments of ozone layer modification and its impact and also a policy support document setting out in easy understood terms some of the issues concerning the ozone layer and the factors which affect its depletion which the Vienna Group should consider in elaborating a protocol [Para 61, Document No (1)].

**Committees/secretariat:** This study has shown in document no. 3 and 4 that the secretariat also brought benefits to states around the world during the negotiations of the Montreal Protocol because these committees through the secretariat, which was established

by the international forum of UNEP managed to gain the international cooperation and attention.

The Rapporteur, with the assistance of the UNEP secretariat, was entrusted with completing the draft report and having it circulated to all the experts for final adoption [Para 206, Document No. (3)].

Until the secretariat to the Montreal Protocol is established, should the responsibilities of the secretariat as provided in article 7 regarding the collection of data be performed by the UNEP secretariat in its capacity as interim secretariat to the Protocol..... [Para 88, Document No. (4)].

**Committees/advisory panel:** The advisory panel manage to bring cooperation and attention to member states especially to the developing nations in accepting the Montreal Protocol as one of the international environmental laws. This was highlighted in document no. 4 and 6.

The advisory group to the Executive Director of UNEP elaborated on the issues to be addressed by the Working Group, emphasizing the importance of the magnitude of the funding and transfers required for determining the nature, scope and implementation procedures for financial mechanisms to assist the developing countries. He described the existing estimates and views on the total cost with reference to the McKinsey study and the Economic Panel Assessment [Para 90, Document No.(6)].

The advisory group to the Executive Director of UNEP was of the opinion that although remedial action could only be taken in the form of an amendment to the Protocol by the Parties [Para 94, Document No. (4)].

**Committees/working groups:** In addition, document no. 2 and 4 has highlighted that committees, which have been established by the international forum of UNEP's working groups were able to persuade the member states to join the Montreal Protocol.

At the first meeting of the AdHoc Working Group the experts agreed on a format for data and/or estimates of Data (production, imports and exports of CFC's and Halons in 1986) to be submitted to UNEP for the purposes of article 16 of the Montreal Protocol [Para 58, Document No. (4)].

Mr. Chairman then introduced the report of the first session meeting of the Ad Hoc Working Group contained in document UNEP/WG.151/L.4. In particular, drew attention to the work of the AdHoc Working Group on Institutional and Financial Matters contained in Annex II to the report which had brought many of the matters concerned with finance and administration of the proposed protocol close to agreement [Para 69, Document No. (2)].

**Committees/governing council:** The creations of committees, which were established by the international forum of UNEP in order to gain international cooperation, must first go through the Governing Council's approval. This is shown by document 2 and 5.

To that end the Meeting requests the Executive Director to secure the necessary consents of the Secretary General of the United Nations and the Governing Council of UNEP [Para 457, Document No. (5)].

Mr. Mansfield reminded the Vienna Group of its obligation under the relevant UNEP Governing Council decision to develop a protocol that addresses both short and long term strategies for the equitable control of fully halogenated CFCs [Para 34, Document No. (2)].

### CONCLUSION

This study suggests that the practice of rationalisation of the activities of international institutions is intimately connected to the success of the negotiations between member countries. The establishment of international institutions, which include international environmental institutions need to be a stronger basis to employ the appropriate activities and committees in order to ensure and safeguard international attention and cooperation. As referring, to the above-mentioned study on international forum of UNEP under the Montreal Protocol, that international forum should be encouraged to secure adequate resources in order to get international attention and cooperation through her activities and committees. This explained that the importance of these activities and establishment of committees are essential for the international cooperation among member states of the Montreal Protocol. The international forum of UNEP's impact on activities and the establishment of committees under the Montreal Protocol were very strong to the extent that the environmental issues were the ultimate

goal. However, the international economics and equity matters were also discussed in the negotiations of the Montreal Protocol. Nevertheless, the international forum of UNEP under the Montreal Protocol has managed to minimise the conflict between the international environmental issues and the international economics and equity matters by promoting the international financial mechanisms. The establishment of the Montreal Protocol Multilateral Fund as international financial mechanism has highlighted the growing connection between the development and submission of environmental regulations and standards and the stipulation of financial resources to guarantee the implementation, specifically by developing countries (Sands, 2003). Finally, the preliminary findings indicate that UNEP as a international forum which promoting the international financial mechanism in the negotiations of the Montreal Protocol was important in terms of to lead for further development and expansion of rules on financial assistance and technology transfer in order to seek international environmental cooperation for achieving environmental protection goals.

### REFERENCES

- Barrett, S., 2003. *Environment and Statecraft: The Strategy of Environmental Treaty Making*. 1st Edn. Oxford: Oxford University Press. ISBN: 0-19-928609-4.
- Breitmeier, H., 1997. *International Organizations and the Creation of Environmental Regimes. Rights, Rules, Resources in World Affairs*. In: Young, O.R. (Ed.). 1st Edn. *Global Governance: Drawing Insights from Environmental Experience*. Cambridge, MA: MIT Press, pp: 87-114. ISBN-10: 0-262-74020-6.
- Breitmeier, H., O.R. Young and M. Zurn, 2006. *Analyzing International Environmental Regimes: From Case Study to Database*. 1st Edn. Cambridge, MA: MIT Press. ISBN-10: 0-262-52461-9.
- Harris, P.G., 2002. *International Environmental Cooperation*. 1st Edn. Colorado: University Press of Colorado. ISBN: 0-87081-678-0.
- Maxwell, J.A., 2005. *Qualitative Research Design: An Interactive Approach*. 2nd Edn. Thousand Oaks, CA: SAGE Publications. Paperback. ISBN: 9780761926085.
- Sands, P., 2003. *Principle of International Environmental Law*. Cambridge: 2nd Edn. Cambridge University Press. ISBN: 0-521-81794-3.
- Seaver, B., 1997. *Stratospheric ozone protection: IR Theory and the Montreal Protocol on substances that deplete the ozone layer*. *Environ. Politics*, 6 (3): 31-67. DOI: 10.1080/09644019708414341.