Environmental Protection in International Investment Law

-Lessons and Suggestions for Myanmar-

（国際投資法における環境保護：ミャンマー法への視座）

2021 年 3 月

新潟大学大学院

現代社会文化研究科

氏名　MOE Thuzar Oo

TABLE OF CONTENTS

ACKNOWLEDEGMENTS

Firstly, I would like to express my sincere gratitude to the Government of Japan and Japan International Cooperation Center (JICE) for granting me the Japanese Grant Aid for Human Resource Development Scholarship (JDS) Doctoral Degree Program. And I would like to offer thanks to the Supreme Court of the Union Myanmar for giving me this opportunity to study for the Doctoral Degree at Niigata University, Japan.

I would like to extend my deepest gratitude to Professor WATANABE Yutaka, my main supervisor, for accepting me and giving me valuable critical comments and guidance on earlier drafts of this doctoral thesis. Thanks must be extended to co-supervisors Professor YOSHIDA Masayuki and Professor TAMAKI Teiko for their invaluable guidance and suggestions to complete my study work.

Finally, I am genuinely grateful to the member of staff of the office of the Graduate School of Modern Society and Culture of Niigata University for their sincere assistance to me.

LIST OF ABBREVIATIONS

ACIA	ASEAN Comprehensive Investment Agreement
ASEAN	Association of Southeast Asian Nations
BIT	Bilateral Investment Treaty
CIL	Customary International Law
CITES	Convention on International Trade on Endangered Species of Wild Fauna and Flora
CSR	Corporate Social Responsibility
DR-CAFTA	Dominican Republic-Central America Free Trade Agreement
ECD	Environmental Conservation Department
ECL	Environmental Conservation Law
ECT	Energy Charter Treaty
EIA	Environmental Impact Assessment
EKCP	East Kutai Coal Project
EPA	European Union Economic Partnership Agreement
FDI	Foreign Direct Investment
FET	Fair and Equitable Treatment
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
ICSID	International Centre for Settlement of Investment Disputes
IIA	International Investment Agreement
ISDS	Investor-State Dispute Settlement
LRTAP	Long-Range Transboundary Air Pollution on Persistent Organic Pollutants
MEA	Multilateral Environmental Agreement
MFN	the Most Favourable Treatment
MIC	Myanmar Investment Commission

MIL	Myanmar Investment Law
MNREC	Ministry of Natural Resources and Environmental Conservation
NAAEC	North American Agreement on Environmental Cooperation
NAFTA	North American Free Trade Agreement
NHP	National Historic Preservation Act
NT	National Treatment
OECD	Organisation for Economic Co-operation and Development
PCPA	Pest Control Products Act
PMRA	The Pest Management Regulatory Agency
POP	Persistent Organic Pollutants
RIT	Regional Investment Treaty
TNC	Transnational Corporation
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
UNFCCC	United Nations Framework Convention on Climate Change
U.S.	United States
WHC	World Heritage Convention

Chapter I: Introduction

1.1. Research topic and issues

The topic of this research mainly concerns the interaction between International Investment Law and International Environmental Law. It will focus on a relationship between investment protection and environmental protection. Foreign investment can harness the resources to promote environmental protection through a variety of channels (e.g., energy efficiency and waste treatment). On the other hand, investors, including transnational corporations (TNCs), may harm the environment of the host state. This happens in the context of improper disposal of hazardous waste, destruction of biodiversity and cultural heritage, for example. The negative effect of these activities has been emphasised by economists and politicians.[1] This ambiguity also happens in the relationship between bodies of international law regulating foreign investment policies and environmental protection.[2] Foreign investment schemes are much necessary for economic and social development. But sometimes, it has been also a source of social and environmental problems. Foreign investment protection may infringe on environmental protection, and *vice versa*. Because of the controversial standards and principles of both bodies of law, there may be some conflicts between foreign investment schemes and environmental protection measures.

---

[1] SAVERIO DI BENEDETTO, INTERNATIONAL INVESTMENT LAW AND THE ENVIRONMENT 3 (Edward Elgar, 2013).
[2] PIERRE-MARIE DUPUY & JORGE E. VIÑUALES, INTERNATIONAL ENVIRONMENTAL LAW 453 (CUP 2nd ed., 2018).

International Investment Agreements (IIAs) gave certain rights to foreign investors by limiting the sovereignty of the host state to make regulations for environmental purposes.[3] The obligations of the host state under IIAs sometimes conflict with its obligations under international environmental law.[4]

Traditionally, IIAs only dealt with protection for investors, and they did not touch upon other elements, such as environmental protection. The primary objectives of investment treaties are the protection and promotion of foreign investments.[5] But, nowadays, environmental protection has been emphasised by states particularly for states pursuing high levels of environmental protection. Even though early IIAs were silent on environmental issues, some recent IIAs have some provisions relating to environmental protection purposes. The conflicts between investment protection standards and environmental protection measures may increase investment disputes before international investment arbitration.

It is necessary to align international investment law in order to render foreign investment a beneficial tool for development without undermining environmental imperatives. It is desirable to consider obligations in IIAs and Multilateral Environmental Agreements (MEAs) in a harmonious way. Reaching a balance is advantageous to reduce the conflicts between foreign investment protection and environmental protection in a reasonable way. The need to strike an appropriate balance between the promotion of foreign investment and

---

[3] BENEDETTO, *supra* note 1, Preface.
[4] DUPUY & VIÑUALES, *supra* note 2, p.454.
[5] JESWALD W. SALACUSE, THE LAW OF INVESTMENT TREATIES 124 (OUP, 2nd ed., 2015).

the protection of the environment to be a challenge for the states. The main argument in this research is to find a proper balance between investment protection and environmental protection. Indeed, states are struggling with finding a proper balance in this conflict. Considerations of investment tribunals play an important role in seeking the proper balance. The tribunals illustrate the conflicts from different perspectives and put the standards of the IIAs under greater scrutiny in connecting with environmental protection measures of the states. Thus, the research will focus on investment tribunals in order to understand the ways to reach a proper balance.

The present thesis attempts to answer the following legal questions.

(i) States are under obligations arising from IIAs or BITs, and at the same time, under obligations of other international treaties including MEAs. When an obligation under international law on the environment is not compatible with standards of protection under IIAs or BITs, investors may claim compensation in international investment arbitration. Consequently, foreign investors may be reluctant to invest in environment-related investment sectors of the states. In this regard, states have to take consideration into whether the application of investment protection standards could strike a balance between investment protection and environmental protection. When it does this, states are necessary to examine the question of "How do international investment protection standards operate in practice constraint the enforcement of environmental protection regulations by the state?"

(ii) In seeking the proper balance between investment protection and environmental protection, the present thesis examines environmental principles that assist the integration of international environmental law with international investment law. Under precautionary principle, one of the

environmental principles, states can call for action at an early stage in response to environmental risks due to the negative effects of some investment activities. Subsequently, the research has to scrutinise how the precautionary principle is applied in the resolution of investment disputes.

(iii) Due to the negative impact of some environment-related investment projects in different sectors, it may cause severe environmental degradation of the state. While investors' rights have been protected under IIAs, on the other hand, states have the right to protect their environment. States' attempts to protect the environment under international and national environmental regulations may breach some investment protection standards. The conflicts arising out of the attempts by the host state to neutralize the impact of environmental issues in the investment sector have to be considered. Accordingly, it is necessary to examine whether current investment protection standards adequately take into consideration the negative impact of the activities in different environment-related investment sectors.

(iv) At the international level, the current challenge is to achieve a balance between the legitimate interests of economic actors and legitimate environmental interests. Myanmar, one of the developing countries in south-east Asia, is a country with rich natural resources and most FDI is directed towards extractive industries. While Myanmar has been making legal reforms to improve investment protection, at the same time, it has been endeavouring to conserve the environment. Because of the lack of effective investment protection provisions and environmental regulations in Myanmar, it can occur conflicts between investors and the state. Consequently, foreign investors can file investor-state disputes before international investment tribunals. In order to reduce the conflicts and to prevent potential investor-state disputes, a proper balance is needed between investment protection and environmental protection in Myanmar. In this regard, Myanmar needs to conduct the first-ever study of whether the current legal framework in

Myanmar is able to strike a balance between investment protection and environmental protection. How Myanmar can overcome the challenges? What are the potential solutions for reforming the legal framework in Myanmar?

1.2. Objectives for the research

The purpose of the thesis is to achieve an enhancing legal framework for environmental protection in the context of international investment law. This purpose can be pursued through the discussion by reference on current literature, international investment treaties, case law on investment arbitration, and environmental regulations. Specifically, investment arbitration cases involving environmental issues will be examined to illustrate the perspectives of the investment tribunals.

In the present thesis, there are two main objectives relevant to the main topic. First, it will focus on the conflicts between investment protection standards under IIAs and standards under MEAs. Secondly, through the discussion of international practices of the topic, Myanmar can learn ways to resolve the conflicting interests and reach a balance between foreign investment protection and environmental protection. Myanmar needs to conduct a first-ever detailed study of investment protection provisions under current Myanmar's Bilateral Investment Treaties (BITs) and IIAs in connection with environmental protection purposes. Since Myanmar is a country with rich natural resources, the main attraction for foreign investment will be extractive industries. The current Myanmar legal

framework on both investment and environment is not ready to resolve the conflicts. Myanmar might face undesirable Investor-state Dispute Settlement (ISDS) cases due to shortcomings of the current legal framework. Therefore, Myanmar is in need of learning international practices in this context. Myanmar recently enacted Myanmar Investment (MIL) to attract foreign investment. However, MIL may have shortfalls from international standards, especially in the environment-related provisions. These shortfalls should be modified in the future to accept more investments. At the same time, Myanmar should modify legislations in order to prevent undue disputes with investors. Before international investment arbitration, some cases raise environmental protection measures violations by investors in different sectors. In this sense, it is required for the host state to take a fair balance between foreign investment protection and environmental protection. Myanmar legislation does not provide this point, but it is desirable to prepare for the future when Myanmar accepts more environment-related investment. In the present thesis, the author tries to make some suggestions to future Myanmar legislation to be in line with international standards.

1.3.Structure and summary of the thesis

The present thesis has four chapters. Chapter I represents the overall ideas and central research questions. Chapter II deals with the application of investment protection standards under IIAs especially in the context of environment-related investment. The first section of Chapter II investigates how the investment tribunals consider the conflicts between

core investment protection standards and environmental regulations. The second section of Chapter II deals with the application of the environmental principle in investment arbitration. Environmental principles are invoked as a justification for certain measures aimed at environmental protection. Among the environmental principles, precautionary principle reflects a relationship between investment protection and environmental protection. Under this principle, states can ask for action at an early stage in response to irreversible threats of environmental harm due to the negative effects of some investment projects. This principle directs environmental regulation to safeguard the environment where they are already at a state of risk. Thus, the section will discuss the application of precautionary principle in investment arbitration by referring to the relevant investment disputes. By studying the application of precautionary principle in investment disputes, Myanmar can learn whether the investment legal framework in Myanmar reflects the precautionary measures of the state. The third section of Chapter II discusses the application of investment protection standards in different environment-related investment sectors. Due to the negative impact to the environment, such investments may cause severe environmental degradation of the state. The section focuses on the investment protection standards to examine whether these standards adequately take into consideration the negative impact of the activities in different environment-related investment sectors.

Chapter III analyses whether the current legal framework in Myanmar is able to strike a balance between investment protection and environmental protection. For this

purpose, the chapter examines the current legal framework for investment protection and environmental protection in Myanmar. The chapter points out the necessity of revision and modification of investment legislations in Myanmar in order to cover the environment-related investment. It also investigates issues concerning environmental protection provisions under the national and international legal frameworks in Myanmar. It considers some challenges in investment and environmental legislation in Myanmar to reach a proper balance between investment protection and environmental protection. The chapter will also consider how Myanmar should prepare for potential investor-state disputes in international investment tribunals, by taking a comparative analysis of the experiences of member states in the Association of Southeast Asian Nations (ASEAN).

Finally, based on the discussions of the previous chapters, the argument of the thesis will be discussed in the Conclusion (Chapter IV). In this final chapter, the thesis will attempt to make suggestions for Myanmar's investment legislation and environmental legislation to provide the necessary protection for foreign investments as well as the state's environment in the future.

Chapter II. Environmental Protection under International Investment Agreements: Issues in Environment-Related Investment

Introduction

International investment law and international environmental law have evolved as specialised fields of international law.[6] The relationship between these became a distinctive international issue through several channels. In the context of investor-state arbitration, the relationship between these fields has been recognised since late 1990s. IIAs gave certain rights to foreign investors by limiting the sovereignty of the host state to make regulations for environmental purposes.[7] The obligations of the host state to protect the investors under IIAs sometimes conflicted with its obligations to protect the environment under international commitments.[8]

In this respect, the chapter mainly discusses the conflicts in investment protection provisions under IIAs and environmental protection regulations under national and international obligations. It also examines how international investment tribunals have recognised the conflict. In this regard, it is necessary to analyse how investment tribunals considered the environmental issues in the cases. It is necessary to study how investment

---

[6] Jorge E. Viñuales, *Foreign Investment and the Environment in International Law: An Ambiguous Relationship,* 80 BRITISH YEARBOOK OF INTERNATIONAL LAW 244-332, p.246 (2009).

[7] BENEDETTO, *supra* note 1, Preface.

[8] DUPUY & VIÑUALES, *supra* note 2, p.454.

tribunals endeavour to strike a balance between the possible competing goals of the protection of the environment and protecting the rights of foreign investment. In this connection, this chapter attempts to analyse the main legal issues raised by interactions between foreign investment protection and environmental protection.

For that purpose, the first section of the chapter analyses the implications of core investment protection standards in investment disputes involving environmental issues. The chapter investigates how the investment tribunals have considered the national and environmental regulations of the host state in connection with these protection standards. States are under obligations arising from investment treaties, and at the same time, under obligations of other international treaties including MEAs. When an obligation under international law on the environment is not compatible with investment protection standards, these standards may be used to challenge measures introduced by host states to protect their environment. Foreign investors may be reluctant to invest in environment-related investment sectors of the states. In this regard, states have to take consideration into whether the application of investment protection standards constraint enforcement of environmental regulations by the state. This section tries to answer the question of "How do international investment protection standards operate in practice constraint enforcement of environmental protection regulations by the state?"

In discussing the conflicts between investment protection provisions and environmental regulations, the role of environmental principles play an important role. Environmental principles assist the integration of international environmental law with international investment law. Environmental principles can be used in the resolution cases in investment tribunals. These principles are used by states as justification for certain measures aimed at environmental protection and investment protection. One of the environmental principles, precautionary principle asks for an action at an early stage in response to threats of environmental harm. According to this principle, states can call for action due to negative effects of some investment activities. Then, the second section of the chapter tries to analyse the application of environmental principles in investment arbitration. The question of the section is based on how precautionary principle is applied in the current investment dispute to strike a balance between investment protection and environmental protection.

Again, due to the negative impact of some environment-related investment projects such as the extraction of natural resources, states may encounter severe environmental degradation. The third section of the chapter considers that whether current investment protection standards adequately take into consideration the negative impact of the activities in different environment-related investment sectors.

2.1. Conflicts between Investment Protection Standards and Environmental Regulations

This section identifies the disputes arising out of the IIA provisions relevant to the protection of the environment, namely those on non-discriminatory treatments such as national treatment (NT)and the most favourable treatment (MFN), fair and equitable treatment (FET), and protection against expropriation. The section investigates how the investment tribunals consider national and environmental regulations of the host state in connection with these investment protection standards. This section tries to answer the question of "How do international investment protection standards operate in practice constraint the enforcement of environmental protection regulations by the state?"

2.1.1. National Treatment (NT)

The requirement for NT has an origin from the Calvo doctrine favoured by Latin-American states during the 19th century.[9] Under this doctrine, aliens and their property are entitled to the same treatment accorded to nationals of the host country under its national laws.[10] It sought to ascertain that the treatment guaranteed to foreign investors did not go beyond the level of protection accorded to nationals to the detriments of an objective

[9] ARNAUD DE NANTEUIL, INTERNATIONAL INVESTMENT LAW: PRINCIPLES OF INTERNATIONAL LAW 258 (Edward Elgar, 2020).
[10] National Treatment, UNCTAD Series on Issues in International Investment Agreements (New York and Geneva: United Nations), United Nations publication, Sales No. E.99.II.D.16.

minimum protection standard for foreign investors.[11] NT involves a commitment on the part of the state not to treat foreign operators in a less favourable manner than domestic operators in a similar situation. Offering a favourable treatment to the foreign investor is important, and national treatment can be a crucial element to the attractiveness of the state.[12] The national treatment standard tends to consist of a provision guaranteeing in one form or another that foreign investors and their investments are to be "accorded treatment no less favourable than that which the host state accords to its own investors".[13]

The obligation to grant foreign investors national treatment is implemented in most modern investment treaties. NT means an obligation of contracting parties to grant investors of the other contracting party treatment no less favourable than the treatment they grant to investments of their own investors. The effect is to create a level playing field between foreign and domestic investors in the relevant market.[14] It essentially obliges the host state to accord to the other party's investors and their investment treatment that is no less favourable than the treatment bestowed upon its own national investors or investments.[15] Current Myanmar-Singapore BIT provides in Article 4:

---

[11] Nicholas DiMascio and Joost Pauwelyn, *Nondiscrimination in Trade and Investment Treaties: Worlds Apart or Two Sides of the Same Coin?,* 102 AJIL 52, 48-89 (2008).
[12] NANTEUIL, *supra* note 9, p.258.
[13] RUDOLF DOLZER & CHRISTOPH SCHREUER, PRINCIPLES OF INTERNATIONAL INVESTMENT LAW 198 (OUP 2nd ed., 2012).
[14] UNCTAD, Bilateral Investment Treaties, 1996-2006: Trends in Investment Rulemaking 33 (2006).
[15] See, for example, Article 4 (1) 2003 India Model BIT; Article 1102 Paras 1-2 NAFTA.

Each Party shall accord to investment of investors of the other Party treatment no less favourable than that it accords, in like circumstances, to investment in its territory of its own investors with respect to the management, conduct, operation, and sale or other disposition of investments.

Recent US treaties specify that the clause will apply when in like circumstances exist.[16] Article 3 (1) of the 2012 U.S. Model Bilateral Investment Treaty provides:

Each Party shall accord to investors of the other Party treatment no less favourable than that it accords, in like circumstances, to its own investors with respect to the establishment, acquisition, expansion, management, conduct, operation, and sale or other disposition of investments in its territory.

To examine the conflicts between environmental measures and protective standards against discrimination, this section illustrates the standard of NT. To this end, it describes how investment tribunals understand and apply the notions of this standard in cases. Two relevant aspects in cases such as “correct comparator” and “justification for differential treatment” will be analysed in this section. First, the foreign investor has to be compared to the correct comparator. Second, possible justification of differential treatment of the foreign investor.

The crucial element for finding out whether the investor was granted NT is to establish the correct comparator. The foreign investor has to be compared to the correct class of national investors for the standard to offer meaningful protection. To ascertain that

[16] See the 2004 and 2012 US Model BITs, Art 3.

differences in treatment are connected to the nationality of the foreign investor, only investors raising similar public policy concerns should be compared.[17]

The existing case law on the standard of national treatment containing an environmental nexus can be seen in *S.D. Myers v. Canada.*[18] This case is one of the first NAFTA arbitration cases in which the tribunal considered the standard of NT containing an environmental connection.

The Claimant, S.D. Myers, is a U.S. corporation based in Ohio that specialises in the process of polychlorinated biphenyl (PCB) remediation. Following the decision of the Organisation for Economic Co-operation and Development (OECD) in 1973 that urged member countries to limit the use of PCBs and to control them in a manner designed to minimise risk to human health and the environment, the U.S. and Canada banned future production of PCBs and also effectively banned the export of PCB waste.[19]

Canada acceded to the Basel Convention on The Control of Transboundary Movements of Hazardous Wastes and their Disposal in 1989,[20] while the U.S. had not ratified the Convention by the relevant time. The Convention aimed to reduce transboundary

[17] DiMascio, *supra* note 11, p. 72.
[18] *S.D. Myers Inc. v Canada,* NAFTA Arbitration (UNCITRAL Rules), Partial Award (13 November 2000).
[19] *Ibid.,* paras. 88-101.
[20] *Ibid.,* para 105.

movement of hazardous waste and further obliged state parties to ensure the existence of local disposal facilities for hazardous waste.[21]

Following the Convention, the Canadian ministers responsible for the environmental protection agreed that the destruction of PCBs should be carried out to the maximum extent possible within Canadian borders.[22] In 1993, Myers Canada was incorporated under the Canada Business Corporation Act.[23] The Canadian Minister of the Environment stated in 1995 that the Canadian position is "that the handling of PCBs should be done in Canada by Canadians".[24] In 1996, the Canadian environmental agencies issued orders that banned commercial export of PCB for waste disposal. The Canadian-U.S. border was closed for cross-border movement of PCBs for approximately 16 months.[25]

In this regard, S.D. Myers asserted that Canada's ban on exporting PCB wastes to the U.S. was a violation of investment disciplines including NT (Article 1102 NFATA). It provides:

> *Each Party shall accord to investments of investors of another Party treatment no less favourable than that it accords, in like circumstances, to investments of its own*

---

[21] According to Article 4 (2), Basel Convention obliges state parties to take the appropriate measures to

> [e]nsure the availability of adequate disposal facilities, for the environmentally sound management of hazardous wastes and other wastes, that shall be located, to the extent possible, within it, whatever the place of their disposal.

[22] *S.D Myers v. Canada, supra* note 18, para. 108.
[23] *Ibid.,* para. 111.
[24] *Ibid.,* para. 116.
[25] *Ibid.,* paras. 118-24.

investors with respect to the establishment, acquisition, expansion, management, conduct, operation, and sale or other disposition of investments.

Canada argued that its ban constituted a uniform regulatory regime under which all were treated equally [26] and that the measure was introduced for environmental reasons. Before assessing the violation of the national treatment standards, the tribunal considered the environmental arguments brought forward by Canada for implementing the ban by connecting to the Basel Convention (para. 121).

In its assessment of the relevant "like circumstances" to determine the relevant comparator, the tribunal emphasised the need to "keep in mind the overall legal context" (para. 245) and referred to a host of different legal material which is considered to be part of this legal context. The tribunal developed a set of environmental principles that it extracted from principles enshrined or affirmed in the North American Agreement on Environmental Cooperation (NAAEC), such as the principles of the Rio Declaration (para. 247). The arbitrators summarised the legal context to determine the likeness of circumstances as "including both [the] concerns with the environment and the need to avoid trade distortions that are not justified by environmental concerns" (para. 250), and to conclude that the foreign investor was in the same business sector and competition with Canadian companies providing PCB waste remediation services, thus in a like situation (para. 251).

[26] *Ibid.,* para. 241.

Having identified the relevant comparators, the tribunal assessed whether the export ban denied the foreign investor national treatment. It states that, although protectionist intent was important, the treatment had to have a “practical impact” on the investor to find a violation (para 254). The tribunal did not find fault with Canada's argument that its policy to destroy Canadian PCB in Canada reflected the understanding underlying the Basel Convention (paras. 108, 182). However, the tribunal focused on the evidence that the decision-makers had altered their perception of this policy, which meant the PCB waste should be disposed of "in Canada by Canadians" when the export ban was introduced (paras. 116, 162, 169, 171). The tribunal concluded that the export ban of hazardous waste had been assumed to favour Canadian competitors.[27] The tribunal found that the legitimate aim of safeguarding domestic PCB proposal facilities could have been pursued with "legitimate, alternative measures" which resulted in the determination that the export ban was not justified. It was found that Canada had breached the NT and minimum standard treatment protections provided by NAFTA.[28]

In this case, the tribunal took into consideration of the environmental regulations that informed the interpretation of the treatment standards. The NAAEC and the environmental rules, the environmental references in NAFTA, and the Basel Convention have been applied by the tribunal. The tribunal considered the Canadian argument that the

[27] DUPUY & VIÑUALES, *supra* note 2, p.462.
[28] *S.D Myers v. Canada, supra* note 18, paras. 256,269,288.

measure challenged had been adopted according to the Basel Convention, and that the obligations under the Basel Convention prevailed over the obligations arising from NAFTA in Article 104.[29] The link between the measure challenged under the national treatment standard and an international environmental norm influenced the reasoning of the tribunal. In this case, the tribunal considered the conflict between investment protection and environmental protection. The tribunal prioritised the investment protection. The analysis of this case indicates that if environmental grounds qualify as legitimate public policy objectives, they can be used to justify a conflicting effect of an adopted measure. However, in this case, the tribunal considered that the real purpose of the export ban by Canada was not aimed at environmental objectives. In considering the national treatment standard, the foreign investor had been compared to the correct Canadian comparator. The tribunal found that the export ban was not justified, and Canada favoured its national competitors. The measures resulting in differential treatment in the export ban was not strongly supported the public policy objectives. Accordingly, it was decided that the measure of an export ban by Canada

[29] Article 104 of NAFTA provides:

1. In the event of any inconsistency between this agreement and the specific trade obligations set out in:
   (a) …
   (b) …
   (c) The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, done at Base, March 22, 1989, on its entry into force for Canada, Mexico and the United States, or
   (d) …,
   such obligations shall prevail to the extent of the inconsistency, provided that where a Party has a choice among equally effective and reasonably available means of complying with such obligations, the Party chooses the alternative that is the least in consistent with the other provisions of this Agreement.

breached the national treatment standard. It can be construed that the states are liable not to focus on protectionist intent when adopting a particular measure. The measure has to be adopted with legitimate public policy objectives.

Again, based on NAFTA Article 1102, an investment tribunal in *Methanex v. U.S.*[30] held that ethanol producer was not in the same situation as a methanol producer, since the two products were not in direct competition (Part IV, Chapter B, para. 28). The tribunal established whether the foreign investor was treated less favourably than comparable domestic investors. The award stated that investment tribunals compare the treatment accorded to the foreign investor to the best treatment bestowed upon one domestic investor falling within the category of relevant comparators (Part IV, Chapter B, para. 2).

Then, in the case of *Al-Tamimi* [31] related to an investment in the limestone mining industry, the tribunal refused to consider that all operators carrying out activities in the same extractive sector were in a similar situation. It considered that the contracts between each party and the government were different and that each of the party's behaviour had led to situations that were not comparable (para. 463).

[30] *Methanex Corp v. The United States,* UNCITRAL, Final Award (5 August 2005).
[31] *Adel A Hamadi Al Tamimi v. Sultanate of Oman*, ICSID Case No. ARB/11/33, Award (3 November 2015).

The case study above suggests that the notions of the national treatment standard such as “like circumstances”, “relevant comparator” and “differential treatment” are important factors. Although the decisions are not consistent in the merits, it is acknowledged that environmental grounds must be qualified as legitimate public policy objectives. Only then, they can be used to justify a conflicting effect of an adopted measure. It cannot be concluded that the NT standard directly constraints the implementation of environmental regulations by the state.

2.1.2. the Most Favourable Treatment (MFN)

The requirement to accord the MFN to a foreign investor is an ingredient found in many modern investment treaties. A typical clause provides that "neither Contracting State shall in its territory subject investments owned or controlled by investors of the other Contracting State or investors of the other Contracting State, as regard their activity in connection with investments, to treatment less favourable than it accords to investments or investors of any third State".[32]

[32] For example, Article 1103 NAFTA; Article 6 ACIA; Article 5 Myanmar-Singapore BIT.

Although the standard of the MFN is not commonly raised in investment treaty arbitration, the case of *Parkerings-Compagniet AS v. Lithuania* [33] illustrates the application of the standard in a case connected to environmental concerns.

The case concerned a foreign investor (Parkerings, a Norwegian corporation) that had taken part in a tender for the building of parking facilities near the old town of Vilnius (capital of Lithuania). The city of Vilnius rejected the investor's proposed multi-story car parks project for cultural heritage concerns because the project was situated in the Old Town of the city of Vilnius, a culturally protected area designated by the UNESCO (paras 363, 382).

However, Parkerings stated that the Municipality authorised another investor, a Dutch company, to build a multi-story car park on the same site (para 363). In Parkerings's view, both projects were facing similar circumstances. The refusal of the Municipality to construct a multi-story car park deprived it of the chance to carry out its investment (para 364). Parkerings complained that it had not been accorded MFN treatment (Article IV of the Norway-Lithuania BIT)[34] and then filed a request for arbitration before the ICSID.

The Respondent contended that the condition of the project built by a Dutch company was fundamentally different from that of the Claimant. The Respondent highlighted

[33] *Parkerings-Compagniet AS v. Republic of Lithuania,* ICSID Case No. ARB/05/8, Award (11 September 2007).
[34] Agreement between the Government of the Republic of Lithuania and the Government of the Kingdom of Norway on the Promotion and Mutual Protection of Investments dated 16 June 1992.

that the proposal of the Dutch company was smaller in size than the Claimant's proposed project, and its design was not extended to the Old Town area. The Respondent emphasised that construction in the Old Town required the approval of the Government's Cultural Heritage Commission (paras. 365 and 378).

Regarding the allegations of the breach of the MFN clause, the tribunal principally analysed Article IV of the BIT which provides:

> "[i]nvestments made by investors of one contracting party in the territory of the other contracting party, as also the returns therefrom, shall be accorded treatment no less favourable than that accorded to investments made by investors of any third state" (para 362).

In assessing whether the MFN standard had been violated, the tribunal recognised that both investors were foreign investors from different countries (para. 372). While both investors were engaged in similar activities and competed for the same project, they were found to operate in a similar economic or business sector (para. 373). Again, the different treatment of the two investors was also determined since the other investor was authorised to build its proposed project and had become a party to a cooperation agreement, whereas the complaining investor was not. The tribunal noted that the existence of different treatment accorded to another foreign investor in a similar situation is the vital condition of the violation of the MFN clause. In this connection, in order to compare the essential conditions, the tribunal broadly analysed the notion of "like circumstances" (para 369). The tribunal

considered that the situation of the two investors will not be in like circumstances if a justification of the different treatment is established (para 374, 375).

Then, the tribunal discussed the differences between the two proposed projects. It established that the project proposed by the Claimant was considerably bigger than that of the other. But the tribunal considered that the difference in the size of the two projects was not decisive to establish that the two investors were not in like circumstances (paras 390-391). Regarding the location of the projects, the project proposed by the Claimant extended much into the Old Town, protected and defined by the UNESCO Convention, and stretched near the historical site (paras 381, 385). The tribunal took into consideration the possible direct and indirect environmental effects and possible destruction of cultural concerns due to the construction works in the Old Town area (paras 385-388). In this light, the tribunal decided that the extension of the building project into the Old Town proposed by the Claimant was a decisive difference between the two proposed projects (paras. 392, 395-396).

The tribunal stated that: the fact that [Claimant's] project in Gedimino extended significantly more into the Old Town as defined by the UNESCO, is decisive. Indeed, the record shows that the opposition raised against [Claimant's project] were important and contributed to the Municipality decision to refuse such a controversial project. *The historical and archaeological preservation and environmental protection could be and in this case were a justification for the refusal of the project.* The potential negative impact of [Claimant's

project] in the Old Town was increased by its considerable size and its proximity with the culturally sensitive area of the Cathedral. Consequently, [Claimant's project] in Gedimino was not similar with the [project] constructed by [the other investor]" (para. 392).

The tribunal found that the differences in the size of both projects, as well as the extension of the projects into the Old Town, were important enough to determine that the two investors were not in like circumstances. The tribunal has concluded that the municipality had legitimate grounds to distinguish two projects. The tribunal noted that the Claimant failed to prove that the other foreign investor had received treatment more favourable with respect to administrative procedures (para. 393). The refusal of the authority was justified by various concerns especially in connection with historical and archaeological preservation and environmental protection (para. 396). Finally, the tribunal found no breach of MFN standard.

The case above discussed the tribunal's interpretation of MFN standard under the applicable BIT by relying on the UNESCO Convention. The historical and archaeological preservation and environmental protection concerns under the UNESCO was considered as a legitimate justification for the refusal of the project. The important element in rejecting the existence of like circumstances between the foreign investments under the comparison was the fact that the investment under discussion concerned an area that fell within the protection of the UNESCO Convention. The decision indicates that cultural heritage and environmental concerns constitute components of the likeness principle under the MFN standard. The

tribunal considered environmental and cultural reasons in its interpretation of MFN treatment in particular of the concept of "like circumstances". From this case study, it can be learned that a state's regulatory measure can be justified if environmental considerations are part of adopting the measure. The environmental and cultural reasons were significant in the application of MFN standard in investment disputes.

2.1.3. Fair and Equitable Treatment (FET)

FET contains prominently in almost all IIAs.[35] The protective scope is rather vague, and investment tribunals embraced distinct interpretations in each individual case. Challenges to environmental regulation in investment disputes often include allegations of the breach of the fair and equitable treatment standard.

The key functions of the standard of FET may be included in three major categories of the government: judicial, legislative, and executive.[36] The investment tribunals have often assessed the scope of regulatory stability under the legislative function and legitimate expectation under the executive functions for the development of the FET standard.[37] The most prevalent notions in this context are fair procedure, non-discrimination, protection of the

[35] For example, Article 1105 NAFTA; Article 11 ACIA; Article 10 (1) ECT; Article 3 Myanmar-Singapore BIT.

[36] CAMPBELL MCLACHLAN, LAURENCE SHORE, MATTHEW WEINIGER, INTERNATIONAL INVESTMENT ARBITRATION: SUBSTANTIVE PRINCIPLES 296 (OUP 2nd ed., 2017).

[37] KATE MILES, THE ORIGINS OF INTERNATIONAL INVESTMENT LAW: EMPIRE, ENVIRONMENT AND THE SAFEGUARDING OF CAPITAL 168 (CUP, 2013).

investor's legitimate expectations, transparency, and proportionality.[38] A further notion identified by scholars is the "obligations of vigilance and protection".[39]

A number of investment tribunals have referred to the legitimate expectation of the investor as an element of the FET standard.[40] It is also recognised that legitimate expectations play a vital role in the understanding of FET.[41]

The case of *Glamis Gold v.US.*[42] concerned with the legitimate expectation of the investor and the scope of regulatory measures, together with the development of the FET standard.

The case was brought by a large Canadian-owned mining company, Glamis Gold, against the US government. Glamis owned mining rights in land in the south-eastern California Desert Conservation Area (para. 31). The area was designated as a site of special cultural concern. Californian legislation prohibited both state agencies and private parties operating on public property from using the land in a manner that would cause severe or irreparable damage to any Native American sanctified cemetery, religious or ceremonial site,

---

[38] Roland Klager, *Fair and Equitable Treatment and Sustainable Development, in* Marie-Claire Cordonier Segger, Markus W Gehring, Andrew Newcombe, SUSTAINABLE DEVELOPMENT IN WORLD INVESTMENT LAW 241-262, pp.246-249 (Wolters Kluwer, 2011).
[39] Katia Yannaca-Small, *Fair and Equitable Treatment Standard: Recent Developments, in* August Reinisch, eds., STANDARDS OF INVESTMENT PROTECTION 111-130, pp.118-119 (OUP, 2008).
[40] For example, *Parkerings v.Lithuania, supra* note 33, paras. 330-331.
[41] Katia Yannaca-Small, *Fair and Equitable Treatment Standard: Recent Developments, in* August Reinisch, eds., STANDARDS OF INVESTMENT PROTECTION 111-130, p.125 (OUP, 2008).
[42] *Glamis Gold, Ltd v. the United States of America,* UNCITRAL, Award (8 June 2009).

or sacred shrine (para. 82). California had also brought in new regulatory measures, which included requirements for backfilling and grading for mining operations around Native American sacred sites (para. 166). The purpose of these measures was to protect the sacred sites from the adverse environmental effects of the proposed mining operations (para. 174).

When Glamis sought an approval for a mining project to extract gold from an area close to the cultural site, the project was ultimately rejected under the Californian legislation. Glamis challenged the measures, contending that they were arbitrary and discriminatory, and were designed to block the project rather than genuinely to address environmental and cultural concerns associated with mining activities. Glamis claimed that the US had unfairly targeted the area, and that the US government had refused Glamis to operate (paras. 568-574). Glamis claimed that Californian legislation introduced a retrospective and an undue delay in considering the project, and rendered it economically unworkable. Glamis argued that the authorities had no discretion to refuse the plan; rather, a long-standing interpretation of the National Historic Preservation Act of 1966 (NHPA) had the effect of allowing the permission. In this regard, the Claimant alleged, among other things, a breach of the FET standard under NAFTA Article 1105 (paras. 633, 636). Again, Glamis focused on the US government's cultural review of the investor's mining project. After the review, the project had been declared culturally significant. The Claimant alleged that there were various procedural

deficiencies in the review process, and argued that it violated the arbitrariness, transparency, and due process elements of the NAFTA Article 1105 standard (paras. 645-650).

The Respondent contended that the cultural review process was carried out in accordance with Section 106 of NHPA. The World Heritage Convention (UNESCO 1972 Convention) ratified by the United States and incorporated into the NHPA, recognized that the destruction of any cultural site impoverishes “the heritage of all the nations of the world” (para 84). According to Section 106 of NHPA, federal agencies must consider, prior to the authorization of any federal fund expenditure or license issuance, the effects of such undertaking on historic properties included in or eligible for inclusion in the National Register (para. 77). To ensure compliance with Section 106, the Advisory Council on Historic Preservation promulgated regulations, which outline a series of procedures known as the Section 106 Process (para. 78). Respondent argued that there was no delay that rose to the level that would breach the customary international law minimum standard of treatment. Then, the Respondent asserted that the cultural review of the project was neither arbitrary nor lacking in transparency (para. 651). The Respondent contended that each of the measures was adopted in accordance with due process (para. 716).

With respect to the claim under Article 1105 of the NAFTA, the tribunal first discussed "a reasoned, complicated legal opinion" drafted by U.S. Federal Government. This legal opinion changed a "decade-old rule and century old-regime" upon which Claimant had

based reasonable expectations (paras. 758, 761). The regime was the "unnecessary or undue degradation" standard, according to which the discovery of Native American artifacts at a mining site could require mitigation but would not lead to a denial of the mining project. (para. 758). The tribunal found that such a change did not violate the rights of the investor, as the Opinion was neither arbitrary, nor exhibiting a manifest lack of reason, nor exhibiting obvious unfairness or evident discrimination against this particular investor (paras. 763-765).

Concerning the alleged legitimate expectations of the investor, the tribunal highlighted that these would require at least a "quasi-contractual relationship between the State and the investor, whereby the State has purposely and specifically induced the investment" (para. 766). The tribunal did not find the facts such as (i) Claimant was operating in a climate that was becoming more and more sensitive to the environmental consequences of open-pit mining; (ii) although the Opinion came to a different result than a reasonable investor might expect under the mining regulatory regime as it stood, the federal government did not make specific commitments to induce Claimant to persevere with its mining claims (para. 767). The federal government did not guarantee the Claimant approval of its claims nor did it offer Claimant any benefits to pursuing such claims beyond the customary chance to exploit federal land for possible profit (para. 767). Therefore, the quasi-contractual relationship which was a prerequisite for consideration of a breach of Article 1105 (1) based upon repudiated investor legitimate expectations did not exist (para. 767).

Regarding the alleged delay in reviewing the investor's mining project, the tribunal found that the review was a particularly complicated, contested issue and the federal government was quite aware of the likelihood of litigation in review processes (para. 774). The tribunal did not find a second round of the review to be manifestly arbitrary, completely lacking in due process, exhibiting an evident discrimination, or manifestly lacking in reasons (para. 776). Then, the tribunal was satisfied with the host state's reasoning for the application of the specific methodology for the cultural survey (para. 782). Moreover, the tribunal has also convinced the evidence the host state offered for having used a diligent review procedure (paras 784-7).

Regarding the enactment of the Senate bill under the Californian legislation which mandated backfilling requirements for all excavations (para. 166), the tribunal found that the bill did not specifically target the investor (paras. 792-796). The tribunal decided that none of the reasonable expectations of the investor was violated by changes to a predictable and transparent framework (paras 799-802) and the bill was not arbitrary (paras. 803-5). The tribunal also refused a violation of the standard of treatment through the regulations of the State Mining and Geology Board. In the absence of specific assurances, there was no breach of the investor's legitimate expectations and the investor could not expect the host state to refrain from passing legislation affecting it (paras 811-813). The regulation was based on sufficient scientific evidence and not arbitrary (paras 817-818). Finally, the tribunal found that

the cumulative effect of all measures did not reach the level of a violation of the fair and equitable standard (paras. 824-8).

In this case, the tribunal looked at the FET standard by analysing the scope of regulatory stability and the legitimate expectation of the investor. From this case study, it can be seen that the long-standing legal framework of the state can be legitimately altered for environmental reasons if the government has not given specific guarantees to the contrary to a foreign investor. The tribunal's emphasis on the necessity of a "quasi-contractual relationship" underscores the diminished protection afforded by the notions of the "legitimate expectation", and the "stability of the regulatory framework". Consequently, environmental concerns can lead to a legitimate alteration of the legal framework, unless the change is arbitrary or targets a specific investor.

2.1.4. Expropriation

Protection against the expropriation under IIAs is the most common safeguard of foreign investors. Nationalisation or expropriation of the foreign property was relevant in the 1960s and 1970s relating to national sovereignty over natural resources.[43] Since then, outright nationalisation or direct expropriation has become significantly less frequent and is

[43] See General Assembly Resolution, "Resolution on Permanent Sovereignty over Natural Resources", Resolution 1803 (XVII), UN Doc. A/5217 (1962), 14 December 1962.

less likely today,[44] with a variety of states realising the importance of foreign investment for their economic development purposes. This change takes place as a result of the measures taken by state action aiming at the protection of the people's health, environment or the protection for the public welfare.[45]

In history, direct taking of foreign property has been one of the most considerable risks to foreign investment.[46] Direct expropriation is an open, deliberate, and acknowledged taking of property, such as an outright seizure or formal or obligatory transfer of title in favour of the host state.[47] Measures constituting direct expropriation are unlikely instruments for implementing environmental standards. A transfer of title over investment for environmental reasons can only be seen in a few situations.

Such a situation founded the factual basis of the decision in the case of *Santa Elena v. Costa Rica.*[48] A Costa Rican corporation, Santa Elena, was established in Costa Rica in 1970 to operate a tourist resort and residential community in Costa Rica. The area had a rich variety of plant and animal life, as well as a tropical dry forest that was home to a dazzling diversity of flora and fauna. The government considered that the project development

---

[44] Simon Baughen, *Expropriation and Environmental Regulation: The Lessons and NAFTA Chapter 11,* 18 JOURNAL OF ENVIRONMENTAL LAW 209, 207-228 (2006).
[45] OECD, *"Indirect Expropriation" and the "Right to Regulate" in International Investment Law,* OECD Working Papers on International Investment (2004/4) p.2.
[46] KYLA TIENHAARA, THE EXPROPRIATION OF ENVIRONMENTAL GOVERNANCE: PROTECTING FOREIGN INVESTORS AT THE EXPENSE OF PUBLIC POLICY 74 (CUP, 2009).
[47] *Metalclad Corporation v. United Mexican States,* Award (30 August 2000), para. 103; *Glamis Gold v. US, supra* note *42,* para. 355.
[48] *Compania Del Desarrollo De Santa Elena, S.A. v. The Republic of Costa Rica,* ICSID Case No. ARB/96/1, Award (17 February 2000).

proposed by the investor would interfere with environmental protection of the area. In 1978, Costa Rica issued an expropriation decree with compensation for the investor's property to include the land in an already existing nearby national park to maintain its conservationist objective (paras. 17-18). The property was openly expropriated by decree so that the issue of the expropriation was not subject to dispute. It had no objection to the expropriation. Hence, the case concerned the legality of the expropriation for an environmental purpose. Santa Elena only contended the amount of compensation fixed by the host state (paras. 19, 56).

In this case, the Respondent provided evidence of its international obligations to protect the environment. In particular, the state noted that the area was listed as a World Heritage Site (para. 46). The purpose of the expropriation was the expansion of the park for the preservation of biodiversity. Therefore, the Respondent argued that the purpose of the measure should be taken into account in the calculation of damages. However, the tribunal rejected any evidence submitted by the Respondent as to its international obligations to preserve the environment. The tribunal declined to consider the host state's obligations under international non-investment law.[49] In approaching the question of compensation, the tribunal deemed that the purpose of protecting the government did not alter the legal character of the taking for which adequate compensation must be paid. While the reason for direct expropriation may be classified as a public purpose, it did not affect the measure of

[49] *Santa Elena v.Costa Rica, supra* note 48, para 32; M. Hirsch, *Interactions Between Investment and Non-Investment Obligations, in* P. Muchlinski, F. Ortino and C. Schreuer, THE OXFORD HANDBOOK OF INTERNATIONAL INVESTMENT LAW 154-181, p.169 (OUP, 2008).

the compensation to be paid (para. 71). The tribunal cited the phrase that "[e]xpropriatory environmental measures- no matter how laudable and beneficial to society as a whole- are […] similar to any other expropriatory measures […]." (para. 72). The tribunal accepted that the expropriation occurred in 1978 and decided that it need not take into the consideration the purpose of the expropriation in the calculation of damages. In this case, the tribunal dealt with an explicit, direct expropriation for environmental reasons, for which it had to determine the correct amount of compensation. Also, the tribunal pointed out that the obligation to pay compensation remained since the environmental protection measures did not affect the nature of the expropriation.[50]

From the case above, it can be learned that the host state's obligation to pay compensation remained since the environmental protection measures did not affect the nature of the expropriation.

For the protection of foreign investors, a difference between "direct" and "indirect" expropriation is not significant, since requirements for the legality of expropriation are essentially the same. The requirements for lawful expropriation are a public purpose, non-discrimination, due process of law, and prompt, adequate, and effective compensation.[51] These requirements can be found in many modern investment treaties.[52] For instance, the

[50] DOLZER & SCHREUER, *supra* note 13, p.122.
[51] *Ibid.,* p.99.
[52] See, for example, Article 1110 NAFTA; Article 10.7. DR-CAFTA-, Article 14 (1) ACIA.

ACIA holds that a host state “shall not expropriate or nationalize a covered investment either directly or through measures equivalent to expropriation or nationalization except for a public purpose, in a non-discriminatory manner, on payment of […] compensation and in accordance with due process of the law” (Article 14 (1)). The annexes of the ACIA clarify that non-discriminatory regulatory measures designed to protect legitimate public welfare objectives, such as public health, safety, and the environment, do not constitute indirect expropriation (Annex 2, para (4)).

However, it is noted that not all IIAs prescribed all these requirements for lawful expropriation. Some of the less recent investment treaties do not mention the "due process" criterion. On the other hand, the payment of compensation is the most relevant criterion. Another relevant requirement of a lawful expropriation is that the measure was adopted to extend a public purpose.

Even though this requirement has rarely been questioned by the foreign investor, this criterion was scrutinized in the case of *ADC v. Hungary*.[53] Though the measure is adopted for several different purposes, the regulatory measures which are taken in pursuance of environmental objectives are considered to fulfil a "public purpose".

[53] *ADC Affiliate Limited and ADC & ADMC Management Limited v. Republic of Hungary,* ICSID Case No. ARB/03/16, Award (2 October 2006), paras 429-433.

Currently, direct expropriation is scarcely seen since states are reluctant to put at risk their investment climate by open taking of foreign property.[54] Consequently the concept of "indirect expropriation" has become increasingly relevant. The majority of the current investment disputes conveys to measures potentially qualifying as indirect, not as direct expropriation. The factors establishing indirect expropriation includes (i) the substantial deprivation of the investment,[55] (ii) the interference of the measure with reasonable investment-backed expectations,[56] and (iii) the character of the governmental measure, purpose and context.[57] The most frequently determining factor is the "substantial deprivation" of the investor of its investment. This terminology is used as a requirement in a large number of investment awards dealing with indirect expropriation.

In one of the investment disputes relating to environmental concerns, the case of *Chemtura v. Canada,*[58] the tribunal discussed the substantial deprivation criterion in connection with protection against expropriation and other relevant disputes.

Chemtura Corporation was a U.S. agricultural chemical manufacturer operating in Canada to produce lindane, a pesticide. In Canada, crop protection products were regulated

[54] DOLZER & SCHREUER, *supra* note 13, p.101.
[55] *Chemtura Corporation v. Government of Canada,* Award (2 August 2010), paras. 244, 247, 249.
[56] See, for example, Annex 10.C para. 4 lit a (ii) DR-CAFTA-
[57] OECD, *supra* note 45.
[58] *Chemtura v. Canada, supra* note 55.

by the Pest Control Products Act (PCPA).[59] The Pest Management Regulatory Agency (PMRA)[60] was responsible to prevent unacceptable risks to people and the environment from the use of pest control products. Because of risks associated with lindane, its use on canola was not approved in the U.S., and lindane-based products could not be sold in the U.S. Due to the threat of potential trade restrictions and negative controversy related to canola seed, Chemtura was requested to voluntarily remove canola from the registered uses of lindane-containing products. Chemtura stated that it would not voluntarily withdraw canola from the labels of its seed treatments unless it had suitable alternative products registered to replace them. Regarding the withdrawal of canola use from its lindane registrations, a dispute has occurred between Chemtura and PMRA. PMRA conducted a special review regarding the registration of lindane. As a result of the special review, the PMRA terminated the registration of lindane by the Claimant. After the re-evaluation process, the U.S Environmental Protection Agency announced the orders cancelling the registration of all pesticide products, the authority decided to ban lindane-based products due to health and environmental risks and accordingly terminated some of Chemtura's product registrations (paras 1-49).

[59] PCPA was in force from 1997 to 13 October 2004 and the Regulations from 16 April 1997 to 27 August 2001. PCPA was repealed and replaced by new legislation in 2006 but that the events that gave rise to this claim occurred prior to the entry into force of the new legislation.
[60] PCPA was established in April 1995.

The Claimant argued that its lindane-based pesticides had not been reviewed fairly. Also, the review of lindane had made because of a trade irritant and not of health and environmental considerations (para. 133). The Claimant alleged that the cancellation of its lindane registration constituted an indirect expropriation of its investment. The Claimant argued that the threshold for an indirect expropriation was that of a "substantial deprivation", as noted in the case of *Pope & Talbot* (para. 239).

The Respondent also referred to the steps to assess an expropriation claim as considered in the NAFTA tribunals such as *Pope & Talbot* case (para. 240). The Respondent argued that it did not expropriate the investment, as there had been no substantial deprivation of Chemtura and the conduct of PMRA was a valid exercise of police powers (paras. 93,97). The Respondent stated that PMRA's conduct was in accordance with Canada's international undertakings under the Aarhus Protocol to the Long-Range Transboundary Air Pollution on Persistent Organic Pollutants (LRTAP) Convention (para. 131). The Respondent also argued that Article 1105 of NAFTA did not limit the discretion of regulators to take steps in compliance with their duty to protect public health and the environment (para. 183).

The tribunal assessed that the special review was undertaken by the PMRA in pursuance of Canada's international obligations under the POP protocol which required a re-examination of lindane (paras. 135,138). Concerning the "substantial deprivation" criterion, the tribunal stated that it would be guided by the host of criteria identified by the tribunal in

the case of *Pope & Talbot Inc. v. Canada.*[61] *The Pope & Talbot* tribunal referred to a number of criteria to determine whether there had been an indirect expropriation, including (i) whether the investor remained in control of its investment, (ii) whether it directed its day-to-day operations, (iii) whether its officers and employees were detained by the State, (iv) whether the State supervised the work of the investor's officers and employees, (v) whether the State had taken the proceeds of sales other than through taxation, (vi) whether the State interfered with management or shareholders' activities, (vii) whether the State prevented the distribution of dividends to shareholders, (viii) whether the State interfered with the appointment of directors or management, and (ix) whether the State had taken any other actions ousting the investor from full ownership and control of the investment.[62]

The tribunal pointed out that the determination of whether there had been a "substantial deprivation" was a fact-sensitive exercise in the light of the circumstances of each case (para. 249). In its fact-sensitive assessment, the tribunal relied on quantum evidence, according to which the percentage of lindane-related sales comprised a relatively small part, about 10%, of the investor's overall sales and about 5 % of its overall sales from the crop protection business (paras. 261-263). Moreover, the host state had not interfered with the management, daily operations, or payment of dividends of the investor (para. 264). Therefore, the measures did not amount to a substantial deprivation of the Claimant's

---

[61] *Pope & Talbot Inc. v. Canada*, UNCITRAL (NAFTA), Award (7 August 2000); *Chemtura v. Canada, supra* note 55, paras. 244, 247, 249.
[62] *Chemtura v. Canada, supra* note 55, para. 245.

investment (para. 265). Before determining that the cancellation was not expropriation, the tribunal indicated that the measures constituted a valid exercise of the Respondent's police powers and conducted in a non-discriminatory manner, motivated by the increasing awareness of the dangers presented by lindane for human health and the environment (para. 266).

The findings of this arbitral decision clearly show the economic impact of the ban on lindane on the investor, and it is relevant in the context of an environmental measure. The cancellation of the investor's registrations was justified by reference to international environmental obligations. The tribunal applied the police power doctrine to protect an affected environmental measure. While the assessment regarding the recognised danger of pesticide would not amount to indirect expropriation, the tribunal recognised the danger of the pesticide for environmental concerns by relying on the MEAs. The case indicated that investment protections should be done in a manner that guaranteed the protection of the so-called non-commercial values such as environment and human health.[63] From this case, it is learned that an environmental measure that constitutes indirect expropriation will not be relevant if the investor has not been substantially deprived of its investment. It is also found that the relationship between international environmental law and the domestic measure challenged strengthened the legitimacy of the latter in a significant manner. Canada could

[63] BENEDETTO, *supra* note 1, p.16.

adopt the environmental protection measures pursuant to MEA. Thus, it can be concluded that the application of international environmental law in investment disputes is not controversial.

2.1.5. Summary

This section has analysed some disputes related to environmental concerns. Key investment protection standards under IIAs such as NT, MFN, FET, and expropriation have been discussed in connection with environmental regulations. The section concludes by stating that international investment arbitration tribunals consider the standards of IIAs under greater scrutiny. The tribunal's consideration of investment protection standards in connection with environmental regulations is summarised below.

Under the non-discriminatory treatments such as NT and MFN standard, the tribunal considered environmental concerns to assess the material components of the treatment such as "in like circumstances", "relevant comparators" and "differential treatment". The case studies suggest that environmental grounds conceptually qualify as legitimate public policy objectives and that they can be used to justify a conflicting effect of an adopted measure. *S.D. Myers* tribunal considered that the real purpose of the export ban by the state was not aimed at environmental objectives. The tribunal favoured investment protection since the purpose of the state for environmental protection is not strongly supported.

However, the tribunal assessed the environmental regulations and principles under MEAs. Again, from the cases above, the tribunals' interpretation of non-discriminatory standards referred to the MEAs such as Basel Convention, UNESCO Convention, environmental principles under NAAEC, and Rio declaration. Tribunals recognized that the state's environmental regulatory measures pursuant to MEAs can be justified a conflicting effect of an adopted measure. It cannot be concluded that non-discriminatory provisions directly constraints the enforcement of environmental regulations by the state.

Regarding the FET standard, the case study reveals that the legal framework of the host state can be changed for environmental reasons if state governments have not given specific guarantees to the contrary to a foreign investor. It is also recognised that environmental concerns can lead to a legitimate alteration of the legal framework unless the alteration is arbitrary or discrimination. In the context of expropriation, the case study shows both direct and indirect expropriation cases are relevant to environmental concerns. It is learned that environmental protection measures did not affect the nature of the expropriation. The host state's obligations to pay compensation remained for expropriation. It is also realised that an environmental measure that constitutes indirect expropriation will not be relevant if the investor has not been substantially deprived of its investment.

In sum, this section has examined the core investment protection standards such as NT, MFN, FET, and expropriation in investment disputes involving environmental issues.

Even the decisions of the disputes may vary from case to case, the tribunals take consideration into the notions of the investment protection standards by referring to the MEAs and national environmental legislation. The key concern stated in this section is that these investment protection standards may be used to challenge measures introduced by host states to protect the environment. This concern is based on the fact the IIAs are invoked to challenge the environmental regulations enacted by host states. In response to the question of this section, the case analysis illustrates that investment protection standards under IIAs are impacting environmental protection regulation. It suggests that international investment protection standards operate in practice can indirectly constraint the enforcement of environmental protection regulations of the state.

2.2. Application of precautionary principle in investment arbitration

Introduction

In the context of environmental law, principles play a significant role despite the changing legal culture.[64] Some research stressed that environmental principle has now accepted widespread support by the international community in relation to a broad range of subject areas and the applicability of the principle is now supported by a growing number of

[64] NICOLAS DE SADELEER, ENVIRONMENTAL PRINCIPLES: FROM POLITICAL SLOGANS TO LEGAL RULES 1(OUP, 2002).

states.[65] According to some scholars, in practice, environmental principles can directly affect and may prove extremely useful to courts in the resolution of cases.[66] Some experts underlined that environmental principles are considered to provide consistency to international environmental law, to provide a framework for interpretation and application of domestic environmental laws and policies, and assist the integration of international environmental law with other international law fields.[67]

Environmental principles are incorporated in various international conventions. The 1972 United Nations Conference on the Environment in Stockholm first introduced the environment as a major issue. The Stockholm Declaration established 26 principles which placed environmental issues at the forefront of international concerns. According to Principle 21, the states have sovereign rights over their natural resources and the state must not cause damage to the environment. Principle 21 provides:

> *States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.*

---

[65] PHILIPPE SANDS & JACQUELINE PEEL, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 234 (CUP, 4th ed., 2018).
[66] SADELEER, *supra* note 64, pp.289-290.
[67] Ulrich Beyerlin, *Different Types of Norms in International Environmental Law: Policies, Principles, and Rules, in* D. Bodansky, J. Brunnee and E. Hey, eds., THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 425-450, p.429 (OUP, 2007).

In 1992, several environmental principles were explicitly recognised in the United Nations Conference on Environment and Development (UNCED). The 1992 Rio Declaration on Environment and Development adopted various environmental principles including the prevention principle (Principle 2 or Principle 21 of Stockholm Declaration), the precautionary principle (Principle 15), and the polluter pays principle (Principle 16). In some scholar's view, these principles have sufficient legal effects.[68]

Environmental principles are used by states as justification for certain measures aimed at environmental protection and protection of the rights of foreign investors.[69] However, this section does not claim to provide a comprehensive discussion of all environmental principles. One of the main environmental principles, precautionary principle, which reflects a relationship between international environmental law and international investment law will be discussed in this section. This principle requires that steps should be taken to prevent harm to the environment due to the negative effects of some investment activities.

In the international investment context, states and investors have obligations not only to protect the investment but also to protect the environment. Due to the vulnerability of the environment, some investment activities such as exploitation of mining projects may affect an irreversible natural resource in the long-term. In fact, the environmental harms

[68] SADELEER, *supra* note 64, p.368.
[69] FLAVIA MARISI, ENVIRONMENTAL INTERESTS IN INVESTMENT ARBITRATION: CHALLENGES AND DIRECTIONS 29 (Wolters Kluwer, 2020).

caused by investment activities are difficult to predict in advance and sometimes in irreversible nature. Environmental risks became significant issues with implications for industry sectors and socio-economic sectors. Industrial societies became more conscious of the environmental risks that they had unknowingly created.[70] The precautionary principle has been developed as a legal concept in national legal systems dealing with an uncertain environmental risk to society.[71]

The rationale of focusing on precautionary principle relies on the fact that this principle asks for action at an early stage in response to threats of environmental harm, including in situations of scientific uncertainty. According to the principle, states can call for action at an early stage in response to environmental risks due to the negative effects of some investment activities. Precautionary principle directs environmental regulation to safeguard the environment where they are already at the state of certainty and uncertainty risk.[72] In the case of host states rich in natural resources, the environmental risk may occur in the industry sectors as well as in socio-economic sectors. Precautionary principle becomes relevant in the context of international investment to assess the environmental risk due to the negative effects of some investment projects.

In addition, to understand the negative effects more comprehensively, it is necessary to conduct a scientific examination. An assessment of environmental risk should

---

[70] JOAKIM ZANDER, THE APPLICATION OF THE PRECAUTIONARY PRINCIPLE IN PRACTICE: COMPARATIVE DIMENSIONS 1 (CUP, 2010).
[71] *Ibid.,* p. 2.
[72] SADELEER, *supra* note 64, at 157.

be based on scientific evidence.[73] The scientific evidence must be evaluated before precautionary principle is invoked. However, where there are threats of serious or irreversible damage, lack of full scientific certainty should not be a barrier to take precautionary measures for environmental degradation. In the case of host states, especially for developing countries, scientific evidence for the management of environmental risk is expensive to produce. Regarding the producing of scientific evidence and burden of proof, it is necessary to study how this principle is applied in recent investment arbitration. In addition, it becomes necessary to examine how investment tribunals applied precautionary principle in connection with investment protection standards.

Due to an increasing number of investor-state disputes which involved environmental issues, precautionary principle has to be discussed in the context of international investment arbitration. Where there is a conflict between investment protection standards and concepts of precautionary principle, the tribunal considers discretion in determining the significance of this principle. In this regard, this section attempts to analyse the applicability of precautionary principle in investment arbitration from the standpoint of the investment tribunals. This section argues that investment protection standards under IIAs do not reflect the precautionary measures of the state. By studying the considerations of investment tribunals regarding the concepts of precautionary principle, this section can

[73] Communication from the Commission on the Precautionary Principle, Commission of the European Communities, COM (2000) 1 final, Introduction.

conclude whether investment protection standards under IIAs reflect the precautionary measures of the state. In order to reach the conclusion, this section discusses the substantive content of precautionary principle such as examination of scientific evidence for environmental risk. In addition, procedural aspects such as a shift of the burden of proof will also be discussed.

2.2.1. Components of precautionary principle

Precautionary principle was firstly recognised in UN General Assembly in 1982. UN General Assembly of the World Charter of Nature referred to precaution in one of its variations: "where potential adverse effects are not fully understood, the activities should not proceed". [74] Later, precautionary principle was incorporated in various international conventions. In 1992, it was explicitly recognised in the United Nations Conference on Environment and Development (UNCED). Principle 15 of the Rio Declaration states:

> *(…) in order to protect the environment, the precautionary approach shall be widely applied by States according to their capability. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.*

[74] World Charter of Nature, GA Res. 37/7, 28 October 1982, para. 11(b).

Since then, precautionary principle has been included in various international instruments, environmental treaties, and policy documents in the field of environmental protection. For instance, in Wingspread Statement, the precautionary principle was defined:[75]

> *When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause-and-effect relationships are not fully established scientifically.*

Currently, the precautionary principle can be found in various international environmental conventions involved in international investment arbitration. In international environmental law, varieties of precautionary principle have been adopted in several multilateral instruments, including the United Nations Framework Convention on Climate Change (UNFCCC) 1992,[76] the Biodiversity Convention 1992 [77] and the Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants (1998) (Aarhus Protocol on POPs).[78] The recent instrument, the Protocol on

---

[75] Wingspread Statement on the Precautionary Principle, 1998.

[76] Article 3 (3). It states:

> The Parties should take precautionary measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.

[77] Principle 15 of the Rio Declaration is repeated in the preamble. It states:

> (…) Noting also that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimise such a threat (…).

[78] Preamble. It states:

> Resolved to take measures to anticipate, prevent or minimize emissions of persistent organic pollutants, taking into account the application of the

Biosafety (Cartagena Protocol on Biosafety) (2000)[79] incorporated the aspects of precautionary principle.

Even though the concept of the precautionary principles is interpreted differently, this principle has become a core principle of international environmental law.[80] In the context of investment arbitration, precautionary principle is used as a justification for certain measures. Even though environmental principles have been recognised in international instruments, there is no clear and consistent clarification on the legal status. Scholars differ in their legal appreciation of the precautionary principle. According to some, it has attained the status of customary international law or constitutes a principle of international law.[81] Others express valid doubts about whether the principle has attained such a status in the international sphere.[82] States often rely on precautionary principle as a defence in investor-state disputes. Investors may challenge the states' measures to prevent the environment

---

precautionary approach, as set forth in principle 15 of the Rio Declaration on Environment and Development.

[79] Article 10 (6) states:

> *Lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects of a living modified organism on the conservation and sustainable use of biological diversity in the Party of import, taking also into account risks to human health, shall not prevent that Party from taking a decision, as appropriate, with regard to the import of living modified organism in question as referred to in paragraph 3 above, in order to avoid or minimize such potential adverse effects.*

[80] SADELEER, *supra* note 64, p.97.

[81] *Ibid.,* pp.315-319.

[82] PATRICIA BIRNIE & CATHERINE REDGWELL, INTERNATIONAL LAW AND THE ENVIRONMENT 159-164 (OUP, 2009).

under precautionary principle. The tribunal's consideration in determining the application of precautionary principle both in substantive and procedural aspects will be discussed below.

2.2.1.1. Substantive content of precautionary principle

Despite various versions of the significance of precautionary principle, it can be said that the substantive content of precautionary principle is guided in the application of international environmental law. Even if no full evidence is available as to the harm or likely harm which may cause to the environment, states may take measures prudently in applying precautionary principle to prevent them. Indeed, scientific evidence is particularly important in the application of precautionary principle. Investors may challenge that state regulatory measure is not based on sound scientific evidence, on that basis, they can claim for breach of investment protection standards.

Under principle 15 of the Rio declaration, the necessity is stated to be mandatory: lack of full scientific certainty "shall not be used" to prevent action. Scholars underscored that science plays an important role in the issues between investor's property rights and the state's right to protect the environment.[83] Scientific evidence has become important to

[83] Jacqueline Peel, *The Use of Science in Environment-Related Investor-State Arbitration in* Kate Miles, RESEARCH HANDBOOK ON ENVIRONMENT AND INVESTMENT LAW 244 (Edward Elgar, 2019).

understand the invisible environmental harms such as climate change, ozone depletion, and the accumulation of toxic chemicals.[84]

Bergen Ministerial Declaration on Sustainable Development in the ECE Region stated that "where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation". [85] Commission of European Communities [86] considers that measures applying precautionary principle belong in the framework of risk management.

One of the components of the precautionary principle, the issue of the threats of serious or irreversible damage can be seen in the case of *Aven v. Costa Rica.*[87] In this case, the Respondent referred to the precautionary principle highlighting that there was a " need to take all precautionary measures to prevent or restrain possible damage to the environment or the health of the population. Thus, if there is a risk of serious or irreversible damage or a concern to that effect, one should adopt a precautionary approach and even postpone the activity in question"[88]. The Respondent mentioned that "public agencies in Costa Rica have to comply with the precautionary principle when it comes to their knowledge that there is a

---

[84] *Ibid.*
[85] SANDS & PEEL, *supra* note 65, p.234.
[86] Commission of the European Communities, *supra* note *86*, Section 5.
[87] *David R. Aven, Samuel D. Aven, Carolyn J. Park, Eric A. Park, Jeffrey S. Shioleno, David A. Janney And Roger Raguso v. The Republic of Costa Rica,* Case No. UNCT/15/3, Award (18 September 2018).
[88] *David R. Aven, Samuel D. Aven, Carolyn J. Park, Eric A. Park, Jeffrey S. Shioleno, David A. Janney And Roger Raguso v. The Republic of Costa Rica,* Counter Memorial of the Respondent, (8 April 2016), para. 63.

likelihood of impact to the environment".[89] "Administrative agencies and prosecutors have to take to prevent or cease the commissioning of forestry related crimes. Prosecutors must also order, as precautionary measures, any act or omission that is required from the offender to return things to the state they were in before the fact or simply to cease the effects of the acts to detriment of the environment".[90] Whether the Respondent has breached Article 10.5 (FET) or Article 10.7 (Unlawful Expropriation) of the DR-CAFTA, the tribunal considered the concepts of precautionary principle under national environmental laws and Ramsar Convention or the Convention on Wetlands.

Whether the presence of scientific uncertainty is a condition for the applicability of the precautionary principle in investment arbitration. Some investment arbitrations will be discussed for that purpose. In *Chemtura v. Canada*,[91] the tribunal assessed whether the decision of the host state to review the use of the pesticide lindane was based on scientific grounds. In this case, the tribunal considered the substantive aspect of precautionary principle by evaluating scientific evidence of the pesticide. This case is related to the FET standard, Article 1105 of NAFTA, and international environmental conventions such as the Stockholm Convention on POPs.

Chemtura argued that the PMRA launched its special review of lindane because of a trade irritant and not of health and environmental considerations. It also argued that the

---

[89] *Ibid.,* para. 357.
[90] *Ibid.,* para. 355.
[91] *Chemtura v. Canada, supra* note 5555.

process through which the PMRA reviewed the risks associated with lindane was flawed and these flaws essentially a breach of due process. Seriously flawed and delayed special review and refusal of the registration of lindane by the Canadian government had violated the right of the FET of the company (paras. 93, 125, 130, 133).

Regarding the allegations of FET treatment, Canada argued that it had accorded the Claimant ample due process, conducted itself lawfully and treated fairly, and that Canada had complied with Article 1105 of NAFTA in every respect (para. 97). The Respondent argued that the PMRA's scientific review of lindane was undertaken on the basis of legitimate considerations, exactly within the PMRA's mandate and in accordance with Canada's international undertakings under the Aarhus Protocol to the LRTAP Convention (para. 131).

In the tribunal's analysis, regarding the allegations of the breach of Article 1105 of NAFTA,[92] the tribunal focused on the process of review of lindane, the scope of the prohibition of planting a treated seed, and the cancellation of the Claimant's lindane registrations (para. 110). In the tribunal's consideration, it was noted that at the outset that it was not its task to determine whether certain uses of lindane were dangerous (para. 134). Irrespective of the state of the science, however, the tribunal cannot ignore the fact that lindane has raised increasingly serious concerns both in other countries and at the

[92] "Each party shall accord to investments of investors of another party treatment in accordance with international law, including fair and equitable treatment and full protection and security" (para. 117).

international level since the 1970s (para. 135). Moreover, in May 2009, lindane was included in the list of chemicals designated for elimination under the 2001 Stockholm Convention on POPS (para. 136). This factual context was relevant in assessing whether the PMRA undertook the Special Review because of a trade irritant or as part of an international commitment undertaken by Canada under the Aarhus Protocol [93] (para. 137). In the tribunal's view, the evidence on the record did not indicate bad faith conduct on the part of Canada. It showed that the Special Review was undertaken by the PMRA in pursuance of its mandate and as a result of Canada's international obligations (paras. 138-140). The tribunal concluded that the Claimant's allegations of bad faith in connection with the launching of the Special Review of lindane have not been established (para 143). The tribunal found that it had to "appraise any procedural deficiency in the light of the mechanisms provided by the Respondent itself to manage such potential occurrences" before establishing a breach (para 145). The tribunal underlined that the review process indicated to genuine regulatory concern and it was not within the scope of the tribunal to judge the adequacy of scientific results (para 153).

In this case, the state referred to the provisions of the Protocol to the 1979 LRTAP Convention to justify the launching of a special review of lindane (para. 131). Annex II of the Aarhus Protocol expressly commands the re-examination of the specific usage of lindane,

[93] Aarhus Protocol to the Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants.

even though such re-examination could also be due to domestic health and environmental concerns. The tribunal considered that the Aarhus protocol had been at the origin of the special review process (paras. 139-141). The tribunal justified the measures taken by Canada not only because of the agency's mandate but also because of its obligation to fulfil an international commitment. The tribunal decided that the state had not breached the fair and equitable treatment and ruled in favour of the state (para. V). It was found that PMRA measures to prevent environmental risks were following the precautionary approach under the Stockholm Convention on POPS and Aarhus Protocol. In interpreting the FET standard, the tribunal applied the provisions of Aarhus protocol which recognised precautionary approach as set forth in principle 15 of the Rio Declaration to take measures to anticipate, prevent or minimize emissions of persistent organic pollutants.[94] Also, a special review process to assess the harmfulness of lindane was conducted in applying a precautionary approach to the Stockholm Convention on POPS.[95]

The tribunal also assessed whether the decision of the host state to review the use of the pesticide lindane was based on scientific reasons. Explicitly without evaluating whether the chemical was dangerous, the tribunal relied on international undertakings aimed at the

---

[94] *Ibid., supra* note 78.

[95] Article 1 of POPS states:

> *Mindful of the precautionary approach as set forth in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Convention is to protect human health and the environment from persistent organic pollutants." Article 8 (9) of POPS states that "The Conference of the Parties, taking due account of the recommendations of the Committee, including any scientific uncertainty, shall decide, in a precautionary manner, whether to list the chemical, and specify its related control measures, in Annexes A, B and/or C."*

elimination of lindane. The tribunal found that the initiation of the review process was conducted in good faith and it was legitimate. The substantive component of precautionary principle "scientific evidence" was applied by the tribunal in connecting with the notions of FET. This precautionary approach thus supported the Canadian position that the pesticide in question posed a hazard to the environment. It is noted that the tribunal considered the risk of hazardous to the environment and scientific evidence in connecting with the FET standard.

Again, in the case of *Methanex v. United States,*[96] it can also be found that where an investment tribunal faced with uncertain evidence of environmental risk, the tribunal could adopt a precautionary approach in evaluating the scientific evidence by requiring a less strict standard of proof from the host state adopting the measure.

From the case analysis, it can be learned that the evaluation of scientific evidence is widely considered in cases for assessing environmental harm. Scientific evidence is important to evaluate the components of risk assessment. Lack of scientific certainty itself is not a barrier to the taking of precautionary measures. Investment tribunals generally accept evaluating scientific evidence in the decision process. The conduct of the host state regarding scientific evidence could breach the investment protection standards such as FET since scientific evidence plays a decisive role in evaluating environmental risks. In *Chemtura*, the tribunal considered the fact that lindane was included in the list of chemicals under MEAs.

[96] *Methanex v. US, supra* note 30.

The scientific review process of lindane had been conducted in due process and it did not breach the FET standard. The violation of the concepts of precautionary principle such as consideration of scientific evidence would give rise to a separate claim under the FET standard. It is noted that the Chemtura tribunal considered the risk of hazardous to the environment and scientific evidence in applying a precautionary approach under international obligations. In the substantive concept, precautionary principle specifies the importance of scientific evidence in taking precautionary measures. In international investment arbitration, investors may challenge that the regulatory response of the state is not based on sound scientific evidence and may claim that it may amount to a breach of investment protection standard. It can be construed that the substantive content of scientific evidence under the precautionary principle plays a decisive role in evaluating the environmental risks and reflects the investment protection standards under IIA in investment arbitration.

2.2.1.2. Procedural aspect of precautionary principle

In the procedural aspect of precautionary principle, a shift of the burden of proof is a critical concern. Regarding the scientific evidence in environmental disputes, tribunals are required to determine whether there has been environmental harm in any particular case. It is also necessary to determine which party has to prove an existence of certain scientific evidence.

Traditionally, burden of proof lies on the person contesting an activity to prove that it does or is likely to cause environmental damage.[97] According to the precautionary principle, as claimed by some researchers, the shift of the burden of proof requires "the person who wishes to carry out an activity to prove that it will not cause harm to the environment".[98]

Generally, international courts have required the party claiming a risk of serious environmental harm to give enough evidence. They have not considered that the precautionary principle essentially shifts the burden of proof to the party proposing to undertake potentially harmful activities.[99] However, it is sometimes stated that the precautionary principle entails the promoter a potentially harmful activity to prove that there is no risk of environmental harm.[100] It seems obvious that international agreements in their application of a precautionary intention can introduce such a shift of the burden of proof.[101]

Under the precautionary principle, reversal of the normal burden of proof is required. In other words, environmental regulation is required unless potential polluters prove that their activities are not causing environmental harm.[102] If the precautionary principle establishes a change in the burden of proof, this could also impact the rules concerning the burden of proof

---

[97] SANDS & PEEL, *supra* note 6565, p.234.
[98] *Ibid.*
[99] BIRNIE, *supra* note 82, p.158.
[100] *Ibid.,* p.159.
[101] Guiding principles 10 of Decision V/8 of the COP 5, Alien species that threaten ecosystems, habitats or species', May 2000, explicitly stating that the "burden of proof" that a proposed introduction is unlikely to cause such harm should be with the proposer of the introduction".
[102] Commission of the European Communities, *supra* note *86*, Section 6.4.

in investment arbitration proceedings. In the case of *Aven v. Costa Rica,*[103] the tribunal considered a shift of the burden of proof aspect under precautionary principle.

In this case, in the context of disclosing an existence of risk for wetlands and/or forest, the Respondent has argued that the burden of proof exists on the applicant and linked it to the "precautionary principle" (paras. 444, 527). The Respondent mentioned that under the precautionary principle, the burden of proof of the inexistence of environmental harm always falls on the developer (para. 724). Subsequently, the tribunal decided that the burden of proof lies on the Claimant to evidence that no adverse impact or risk of harm on the project site was to occur as a consequence of the development project (para. 553). In this case, the burden of proof lies on the investors to show that there is no environmental harm to the wetlands and forests of Costa Rica. The tribunal applied precautionary principle in deciding a shift of the burden of proof.

It is observed that a shift in the burden of proof could be achieved according to the interpretation of the precautionary principle. The precautionary principle would tend to shift the burden of proof and require the person who wishes to carry out an activity to prove that it will not cause harm to the environment. According to the interpretation of precautionary principle, the polluters and the polluting states have to consider that their activities would not adversely affect the environment before they carry out the activities. The procedure aspect of burden of proof under the precautionary principle reflects the relationship between

[103] *Aven v. Costa Rica, supra* note 87.

environmental protection and investment protection in investment arbitration. In the procedural aspect, the section discusses that if the precautionary principle establishes a change in the burden of proof, this could also impact the rules concerning the burden of proof in investment arbitration proceedings. It is noted that under the precautionary principle, the burden of proof falls on the polluters and polluting states to show that there is no harm or likely harm to environmental damages.

2.2.2. Summary

The present section explores the applicability of precautionary principle in international investment arbitration. According to the discussion, it can conclude that investment tribunals could show greater deference to substantive and procedural aspects of precautionary principle. Violation of the substantive concepts of precautionary principle would give rise to a separate claim under the investment protection standard. Scientific evidence, a substantive component, plays a decisive role in determining and evaluating environmental risks. If environmental justification measures set forth by the host state are based on scientific evidence, an investment tribunal will consider the precautionary approach in investment arbitration. In the procedural aspect, if the precautionary principle establishes a change in the burden of proof, this could also impact the rules concerning the burden of proof in investment arbitration proceedings.

Even though the conclusions of the tribunals could appear as not uniform, precautionary principle was invoked by the Respondent and confirmed by the tribunal. The investment tribunals could clarify the obligations of the investment protection standards under IIAs by applying the significance of precautionary principle. The insertion of precautionary principle in international treaties indicates a wide acceptance of its general views. Since precautionary principle has been provided in a number of international conventions, states have to implement their international obligations. Precautionary principle could become relevant through measures adopted by the host state to regulate potentially dangerous activities of the investor.

If there are scientific uncertainties relating to the environmental harmfulness of such activities, the investor may argue that measures preventing it from continuing the activity violate its protected rights under relevant IIA. In such a situation, the host state may rely upon its national measures, based on the precautionary approach. In an investment dispute, the host state could rely on the precautionary principle as a conceptual basis for the adopted measure. States are required to implement precautionary measures in compliance with international commitments. Precautionary principle has to be invoked in investment legislation. In applying precautionary principle under MEAs, new environmental regulatory measures of the state may affect investment protection standards under IIAs. International investment treaties must recognise the state's evolving environmental governance and honour previously ratified agreements.

In sum, this section investigates that the substantive content and procedural aspects of precautionary principle have been applied in investment tribunals. Even precautionary measures are reflected under the investment protection standards, investors, host sates and international investment tribunals could show greater deference in this context.

2.3. Application of investment protection standards in environment-related investment sectors

Introduction

In studies of the relationship between investment protection and environmental protection, considerable focus should be given to environment-related investment projects. Due to the negative impact of some environment-related investment projects such as the extraction of natural resources, it may cause severe environmental degradation of the state. While investors' rights have been protected under international investment agreements, the host states have the right to protect their environment. States' efforts to protect the environment under international and national environmental regulations may be in contradiction with investment protection standards under IIAs. Even there are a lot of factors to reform the law on foreign investment protection, the relationship between investment and environmental concerns has emerged as a primary source.[104] The conflicts arising out of the attempts by the host state to neutralize the impact of environmental issues in the investment

[104] MILES, *supra* note 37, p.126.

sector have to be considered. Accordingly, this section focuses on the investment protection standards of IIAs to examine whether these standards adequately take into consideration of the negative impact of the activities in different environment-related investment sectors.

International investment tribunals have occasionally dealt with issues connected to the protection of the environment. Recently, conflicts between mining companies and local communities have occurred, in which the latter claim that investment project in question threatens the environment of their livelihood.[105] Growing investment demand in mining, oil production, and mining of natural resources is increasingly conditioned by concerns over environmental protection. Compliance with environmental regulation becomes one of the major changes in investment.[106] Governments in developing countries are responding to this trend by adopting environmental legislation, improving environmental administration, and establishing new rules and standards. Some developing countries such as Indonesia and Myanmar are rich in natural resources and the extractive industry is an attraction for foreign investment. For instance, recent FDI in Myanmar has been concentrated in the oil, gas,

[105] Tineke Lambooy, Iman Prihandono, and Nural Barizah, *Foreign Direct Investment in the Mining Industry in Indonesia: Disputes Concerning Environmental Degradation and Pollution*, *in* Yulia Levashova, Tineke Elisabeth Lambooy, I. F. Dekker, eds., BRIDGING THE GAP BETWEEN INTERNATIONAL INVESTMENT LAW AND THE ENVIRONMENT 383-440 (Eleven International Publishing, 2016).

[106] Mohammed Abdelwahab Bekhechi, *International Investment and Environmental Protection: Notes on the Environmental Conditions of Investment in the Oil and Mining Sectors, in* THE INTERNATIONAL BUREAU OF THE PERMANENT COURT OF ARBITRATION, INTERNATIONAL INVESTMENT AND PROTECTION OF THE ENVIRONMENT: THE ROLE OF DISPUTE RESOLUTION MECHANISM 73-90, p.78 (Kluwer Law International, 2001).

hydropower, and mining sectors,[107] most of which have adverse environmental and social impacts. In this regard, some relevant international investment disputes in the mining sector, and the protection of biodiversity and cultural heritage sector will be discussed below.

2.3.1. Investment protection standards and environmental regulations in the mining sector

A number of investment arbitration cases indicate that there have been many instances where environmental issues have concerned in the mining sector. The conflicts in the mining sector raise a question of to what extent investment protection standards are compatible with environmental protection rules. In recent years, investors have brought an increasing number of complaints in the mining sector.

In the case of *Al Tamimi v. Oman,*[108] the Claimant *Al Tamimi* established two mining companies in Oman to operate mining activities in the municipality of Mahda, Oman. The Claimant had concluded 25-year lease agreements with an Omani state-owned mining company (OMCO) in 2006 for the purpose of quarrying the limestone and crushing operations in Jebel Wasa quarry (para. 56). In line with the lease agreements, OMCO agreed to use "best endeavours" to obtain the required environmental and operating permits

[107] Yearly Approved Amount of Foreign investment (by sector) for the fiscal year 2018-2019. https://www.dica.gov.mm/sites/dica.gov.mm/files/document-files/yearly_sector_6.pdf
[108] *Al Tamimi v. Oman*, *supra* note 31 .

for the operation of the quarry (para. 55). The Al Tamimi companies agreed to comply with all Omani laws including environmental and mining laws**,** as well as all obligations and conditions imposed by the relevant permits. The companies also agreed to indemnify OMCO against any liability for failure (para. 55). The lease agreement also provided for termination by either party in case of a substantial breach (para. 55).

In 2006, OMCO applied for an environmental permit to the Omani Ministry of Environment and Climate Affairs (MECA) on behalf of the Al Tamimi companies (para. 59). In 2007, MECA issued an initial environmental permit and granted only quarry limestone rock products from a particular area (paras. 61-2) in Jebel Wasa quarry. Consequently, the Claimant started the quarrying operations in 2007. However, OMCO terminated the lease agreements in 2008. OMCO indicated, as reasons for termination of agreements, operations by the Al Tamimi companies outside the permitted specified area; failure to register the companies in accordance with the laws of Oman; and failure to reimburse the payments to OMCO by the companies (paras. 63-70). Despite the supposed termination of the lease agreement, the Claimant continued operations in the quarry site. In 2009, MECA issued a number of citations against OMCO in respect of the companies alleged actions. The Omani authorities issued fines and informed that the Claimant's operation including operating machinery without necessary permits and failure to obtain permits for housing and uprooting trees was illegal. OMCO informed the companies that the continued quarrying operation was

illegal and allowed 30 days to vacate the quarry site (paras. 71-75). In 2009, the Claimant was arrested by the Omani police due to the misbehaviours of the companies such as stealing sands and stones without a permit and violating Omani environmental law (paras. 77-78). Although the production of limestone was ceased, the companies continued to sell surplus inventory from the site until police intervention was made. The interventions of the police made it difficult for companies to continue any operations at the quarry site and the staff of the companies was suspended and left the quarry site (paras 82-83).

Consequently, the Claimant filed an ICSID arbitration against Oman in 2011, based on the US-Oman Free Trade Agreement (FTA). The Claimant alleged that Oman breached expropriation (Article 10.6), the minimum standard of treatment (Article 10.5), and national treatment (Article 10.3) under the FTA (paras.120, 167, 181, 195).

Regarding the expropriation claim, the Claimant presented a number of measures including in particular (i) the termination of the lease of agreements; (ii) Mr. Al Tamimi's arrest; (iii) the police-coerced signature by Mr. Al Tamimi of the undertaking to cease operations at the quarry site; (iv) the prosecution of Mr. Al Tamimi; and (v) the forced disposal of the Claimant's physical infrastructure and the workforce from the quarry (paras. 167-172). The Respondent contended that it did not expropriate the Claimant's investment since its actions were a valid exercise of its right to enforce its environmental laws under the "police powers" doctrine as incorporated in Annex 10-B of the US-Oman FTA. Further, it referred to

the Article 10.10 of the FTA and described that the state parties should not be restricted from taking appropriate measures to ensure the investment activity sensitive to environmental concerns. Also, it contended that the actions of Omani police were *bona fide* and carried out for a legitimate purpose (paras. 177-8).

Regarding the expropriation claim, this study points to two significant issues such as termination of the lease of agreements and exercising police power doctrine. With respect to the first issue, the tribunal considered that the termination of lease agreements was a result of a contractual dispute between the contracting parties. Thus, the Claimant's investment was lost not as a result of sovereign expropriation. The tribunal deemed that any alleged action taken by Oman after the termination of the lease agreement could not have affected the Claimant's rights to mine because with the termination of the lease agreements, any such property right ceased to exist. Thus, it was held that the Claimant's expropriation claim must fail (paras 353-354). In regard to the second issue, the tribunal pointed out Mr. Al Tamimi's arrest took place within the lawful bounds of the state's exercise of police powers to ensure compliance with its national laws, including its environmental laws and regulations. The tribunal agreed to the arguments of the Respondent in this matter. The tribunal considered that state parties should not be restricted from taking appropriate measures to ensure the investment activity sensitive to environmental concerns according to Article 10.10 of the FTA (para. 439). Thus, it was held that the Claimant's expropriation claim must fail

(paras 353-354). In respect of the expropriation claim, the tribunal applied Annexes 10-A and 10-B of the FTA when interpreting Article 10.6 ("Expropriation and Compensation"). Article 10.6 provided that:

> *Neither Party may expropriate or nationalize a covered investment either directly or indirectly through measures equivalent to expropriation or nationalization ("expropriation"), except: (a) for a public purpose; (b) in a non-discriminatory manner; (c) on payment of prompt, adequate, and effective compensation; and (d) in accordance with due process of law and Article 10.5.1 through 10.5.3.*

In this case, the tribunal had referred to para 4 (b), Annex 10-B of the FTA, which states:[109]

> *except in rare circumstances, non-discriminatory regulatory actions by a Party that are designed and applied to protect legitimate public welfare objectives, such as public health, safety, and the environment, do not constitute indirect expropriations.*

The tribunal assessed that "the Claimant would also have to confront the express stipulation in Annex 10-B.4(b) of the US-Oman FTA that non-discriminatory regulatory actions by a state designed and applied to protect legitimate public welfare objectives,

[109] *Ibid*., para. 346.

including protection of the environment – and, the tribunal infers, the enforcement of Omani private property laws – do not constitute indirect expropriations" (para. 368).

Concerning the minimum standard of treatment, the Claimant contended for the state's failure to treat under customary international law including fair and equitable treatment and full protection and security (para.181). The Claimant also described Oman police actions such as the Claimant's arrest, and coercion to stop the quarrying operation violated the most basic notions of fair and equitable treatment and full protection and security (para 183). Regarding the minimum standard of treatment under Article 10.5, Appendix 10-A to the US–Oman FTA states, "…the customary international law minimum standard of treatment of aliens refers to all customary international law principles that protect economic rights and interests of aliens" (para. 182). The Claimant argued that the "principle of proportionality" is a principle of customary international law and according to Appendix 10-A, it was a component of Oman's duty to provide the Claimant with fair and equitable treatment under Article 10.5. (paras. 110, 185). In response to this claim, the state mentioned those other quarry operators were only permitted to continue their operations in accordance with the law and the actions of Oman did not result in the shut-down of operations (paras 188, 193). The state also contended that proper investigation by the state did not constitute regulatory harassment. The actions were conducted fairly and consistently applied to the pre-existing laws (para.190).

In interpreting the content of the minimum standard of treatment, the tribunal recognised the parties' agreement that "the minimum standard of treatment under the US-Oman FTA referred to the customary international law standard and not an autonomous treaty standard" (para. 380). The tribunal referred to chapter 17 of the FTA entitled "Environment". The chapter provided that each state party should "encourage high levels of environmental protection" within their respective territories (para. 387). The tribunal considered the very existence of Chapter 17 exemplified the importance attached by the US and Oman to the enforcement of their respective environmental laws (paras. 388-389). The tribunal also referred to Article 10.10 (Investment and environment) of the FTA. Article 10.10 stated that: "Nothing in this Chapter shall be construed to prevent a Party from adopting, maintaining, or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns". This Article considered forceful protection of the right of either state party to adopt, maintain or enforce any measure to ensure that investment is undertaken in a manner sensitive to environmental concerns (para. 387).

The tribunal observed that the state parties intended to reserve a significant margin of discretion to themselves in the application and enforcement of their respective environmental laws (para. 389). When interpreting the minimum standard of treatment protection under FTA, the tribunal considered itself as being guided by the forceful defence

of environmental regulation and protection provided in the express language of the treaty (para. 389). In the tribunal's view, to establish a breach of the minimum standard of treatment, the Claimant must show that the host state had acted with a gross or flagrant disregard for the basic principles of fairness, consistency, even-handedness, due process, or natural justice expected by and of all states under customary international law (para. 390). The tribunal assessed that the standard will not be breached simply because the host state's administrative procedures did not comply with its internal law. It did not mean that every minor misapplication of the state's laws or regulations will meet that high standard. The tribunal found that the disputed environmental measure was a "good-faith" application or enforcement of a state's law or regulations relating to the protection of its environment (para. 390). Accordingly, the tribunal found that the state did not breach the minimum standard treatment.

In the dispute on national treatment, the Claimant alleged that the state treated the Claimant less favourably than it treats domestic investors in like circumstances (para 195). The state argued that the Claimant proved no evidence to verify his claim with respect to "like circumstances" and the Claimant's submission was not sufficient to identify alleged comparators that are in the same economic group (paras. 201-202).

Regarding the national treatment claim, Article 10.3.2 of the FTA stated that:[110]

[110] *Ibid.,* para. 455.

> *Each Party shall accord to covered investments treatment no less favorable than that it accords, in like circumstances, to investments in its territory of its own investors with respect to the establishment, acquisition, expansion, management, conduct, operation, and sale or other disposition of investments.*

In the interpretation of this provision, the tribunal held that "the Claimant had to show that the treatment he and his investment had received differed materially and substantially from that received by other domestic Omani investors or their investments" (para. 458). The Claimant based his evidence merely on a discussion about other quarries in the area that he had with the operator of a neighbouring quarry. However, the tribunal noted that the Claimant had not been able to present reliable evidence of a suitable comparator and the claim for breach of national treatment would fail due to the lack of reliable evidence (para. 464). The tribunal dismissed the Claimant's national treatment claim (para. 468).

To summarise, the *Al Tamimi* case underlined the state's interference in the operation of the Claimant's mining companies in Oman. The issues concerning the termination of the lease agreements and confiscation of the mining facilities have been mainly discussed. When it does so, the tribunal interpreted investment protection standards under US-Oman FTA. It is noted that if the termination of the agreements concerns a dispute under mining concessions, the investors could not be granted investment protection under the FTA. In implementing the mining legislation to protect the environment, the investors may

be investigated under the national laws. It is found that *bona fide* application of national mining regulations bound within the state's police power. In addition, regarding the national treatment standard, investors are liable to present evidence for finding a reliable comparator in the domestic mining sector. In sum, it can be construed that *Al Tamimi* tribunal focused on environmental protection measures in the mining sector.

The relationship between environmental protection in international environmental instruments and investment protection in the mining sector can also be seen in *Bilcon v. Canada.*[111] In this case, the Claimant, Bilcon argued that its legitimate expectation to operate the quarry had been violated. According to the Claimant, those expectations arose from the extensive encouragement of Nova Scotia officials. The investors also expected that the project would be assessed in accordance with Canadian law (paras. 394-397). The majority of the tribunal found Bilcon had legitimate expectations that Canadian law would be properly applied. They emphasized that an identified breach of domestic law by a host state can amount to a breach of legitimate expectations and resulted in a breach of the international minimum standard under Article 1105 of NAFTA (paras. 588-604).

However, dissenting opinion by one of the arbitrators, McRae argued that whether the officials encouraged the investment and, thus, created "legitimate expectations" is

[111] *William Ralph Clayton, William Richard Clayton, Douglas Clayton, Daniel Clayton and Bilcon v. Canada,* UNCITRAL, PCA Case No. 2009-04, Award on Jurisdiction and Liability (17 March 2015).

irrelevant for the assessment of the NAFTA international minimum standard. McRae stressed that the mere fact that an investor alleges a breach of national law cannot amount to a breach of the NAFTA standard (para. 36, dissenting opinion). Regarding the national treatment standard, the majority found that the environmental assessment procedures imposed on Bilcon constituted a treatment less favourable than Canadian investors in like circumstances received. The majority rejected Canada's argument to restrict comparators to investments or investors to those that, like Bilcon, were undergoing a Judicial Review Panel review or those projects with significant opposition from a local community (para. 691). The majority held that the broad language in Article 1102 of NAFTA and NAFTA's general objective to increase investments signified that the range of comparators should be broader. In comparing the assessment procedures of a number of similar mining projects, the majority found that projects were not evaluated in terms of "core community values" and thus received more favourable treatment (para. 696). In this case, the tribunal interpreted the national treatment standard broadly.

The above-mentioned environment-related cases in the mining sector mainly discuss the interpretation of investment protection standards in connecting with the national mining regulations. From this case analysis, it can be learned that in assessing any breach of the investment protection standards under the relevant treaty, the *Al Tamimi* tribunal considered the forceful defence of mining regulations and interpreted the protections

provided in the express language of the treaty. The *Al Tamimi* tribunal underlined the trend the mining sectors are gaining more space in the interpretation and reasoning of investment tribunals. The tribunal found that the disputed environmental measure was a good-faith application or enforcement of a state's mining laws or regulations relating to the protection of its environment. The tribunal considered whether certain state measures breached the investment protection standards by referring to the domestic mining regulations that seek to protect the environment. Whether the enforcement of domestic environmental law with respect to a limestone quarry investment, the tribunal referred both to Article 10.10 (a clause reserving environmental regulation) and to Chapter 17 (the environmental chapter of the treaty) as a means of interpreting the international minimum standard of treatment. The *Bilcon* tribunal considered the denial of a permit for mining activities in Canada. While the majority of the tribunal found that Canada was in breach of NAFTA obligations, the tribunal acknowledged the economic development and environmental integrity can not only be reconciled but can be mutually reinforcing (paras. 595-601). The *Al Tamimi* tribunal had reasoned the environmental considerations in an increasingly clear and open form when discussing the operation of foreign investment activities in the mining sector.

Notwithstanding the fact the state has enacted laws and regulations in the mining sector, investment activities in mining sector may still cause environmental degradation of the state. While states are struggling to impose mining legislation upon foreign investors,

foreign investors can bring the dispute with the state to an international investment tribunal. Because of its significant adverse environmental effects, the mining sector has been subject to investment arbitration. The conflicts in the mining sector show that the states have to ensure that foreign investment aligns with environmental protection measures.

2.3.2. Investment protection standards and environmental regulations in protection of biodiversity and cultural heritage

The analysis of the relationship involving the protection of biological and cultural diversity and investment schemes will be carried out in this section. The case study will be examined in light of the environmental obligations regarding the protection of certain areas and species, whether particularly relating to biological and cultural protection or not.

An early illustration of how the protection of cultural heritage might conflict with investment protection standards can be seen in the case of *SPP v. Egypt*.[112] In this dispute, with the initial approval of Egyptian General Organization for Tourism and Hotels through an investment agreement in 1974, a joint venture company planned to develop tourist complexes near pyramids in Egypt (para. 43). In the construction period, artefacts of archaeological importance were excavated. Due to political opposition, the Egyptian government declared in 1978 that the relevant parcels of land were a public utility and not

[112] *Southern Pacific Properties (Middle East) Limited (SPP) v. Arab Republic of Egypt*, ICSID Case NO. ARB/843/3, Award (20 May 1992).

suitable for tourism development. The Egyptian government considered that the project was posing a threat to undiscovered antiquities and withdrew its former approval of the project (para. 62). Also, a presidential decree cancelled a previous authorization to use part of the land for tourist activities (paras. 64-65). Notwithstanding the previous approval of the investment, Egypt cancelled the project, and the area was added to the World Heritage List (para. 153).

Consequently, the investor filed an arbitration, claiming that its property had been expropriated in breach of domestic investment law and of the investment agreement. The relevant issue regarding the allegation of the protection of expropriation is the disagreement between the parties regarding the choice of applicable law.

The investor claimed that its property had been expropriated in 1978 in breach of domestic law and an investment agreement of 1974. The Respondent contended that the dispute was to be entirely governed by Egyptian Law according to the first sentence of Article 42 (1) of ICSID. The Respondent further argued that international law could apply only to the extent that it had been incorporated in Egyptian Law, as was the case with the WHC (paras. 75-6). The Claimant opposed that there was no such implicit choice of law and, therefore, international law was applicable in accordance with Article 42 (1) second sentence of the ICSID Convention.[113]

---

[113] *Ibid.,* para 77. The second sentence of Article 42 (1) stated:

> In the absence of such agreement, the Tribunal shall apply the law of the Contracting State party to the dispute (including its rules on the conflict of laws) and such rules of international law as may be applicable.

In this regard, the Tribunal considered that both Egyptian law and international law, including the WHC, were applicable to the dispute.[114] The tribunal further stated that:[115]

> *When municipal law contains lacunae, or international law is violated by the exclusive application of municipal law, the Tribunal is bound in accordance with Article 42 of the Washington Convention to apply directly the relevant principles and rules of international law.*

The situation, which attributes a supplemental and corrective role to international law over domestic law, has received considerable support in the investment case-law (para. 154). In this case, the host state argued that it had adopted expropriation acts in accordance with the WHC so that the application of international law is important in this regard. However, the tribunal considered that the host state's obligation to protect the site had not arisen until the registration by the World Heritage Committee in 1979. Therefore, the expropriation acts could not be justified as conduct required by the provisions of the WHC. The tribunal considered that from 1979 forwards, the obligations of Egypt under the WHC prevailed over the protections granted to investors. Therefore, the compensation due to the investor could not take into account gains that would have accrued after the emergence of the obligation under the WHC. In this conclusion, the priority of international environmental law over domestic investment disciplines was impliedly assessed by the investment tribunal. The tribunal analysed the impact of the WHC as a potential justification for the acts of Egypt.

---

[114] *SPP v. Egypt*, *supra* note 112, paras. 78-80.
[115] *Ibid.,* para. 84.

In addition, regarding the expropriation claim, the Tribunal found contractual liability and sustained the Claimant's argument that the particular public purpose of the expropriation could not change the obligation to pay fair compensation (para. 154). Although the tribunal found that "[t]he obligation to pay fair compensation in the event of expropriation applies equally where antiquities are involved," (para. 159), the tribunal explicitly considered the negative impact of the investment when valuing the Claimant's loss. The tribunal agreed with the Respondent's contention that "the project was located in an area where the [c]laimants should have known there was a risk that antiquities would be discovered (para. 251)".

The tribunal considered that the WHC was relevant in this case and it regulated the conduct of the Respondent. The tribunal also noted that the Convention obliged the Respondent to refrain from acts or contracts contrary to the Convention.[116] The state parties relied on the international environmental convention (WHC), international investment agreement (1974 BIT), and the ICSID provisions. The tribunal considered that both domestic law and international law are applicable under the ICSID Convention. The conflicts arose from Articles 4,[117] 5(d),[118] and 11 (Provisions regarding "World Heritage List") of the

[116] *Ibid.,* para. 78.

[117] Article 4 states:

> *Each State Party to this Convention recognises that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and co-operation, in particular, financial, artistic, scientific and technical, which it may be able to obtain.*

[118] Article 5 state'

> To ensure that effective and active measures are taken for the protection, conservation and presentation of the cultural and natural heritage situated on its

environmental Convention and international investment treaty. Under Articles 4, 5 (d), and 11 of the WHC the tribunal took into consideration of the conflict between the international environmental-related treaties and domestic legislation in its interpretation of the decision. In this regard, how tribunals should take into consideration imprecise provisions of the international environmental treaties becomes a potential problem for the tribunals. In this case, the tribunal considered that WHC prevailed over the investment protection standards. Applicability of domestic law is discussed to some extent, but the turbinal directly applied the relevant principles and rules of international law.

The case shows that the host state may lawfully regulate and/or expropriate private property to protect cultural heritage. The case also illustrates that the state's pursuit of legitimate goals such as cultural heritage protection is not absolute. Policymakers and adjudicators need to achieve an appropriate balance between the public interest and the protection of economic freedoms. However, as the WHC does not include a dispute settlement mechanism, cultural heritage-related investment dispute has emerged in investment tribunal. The investment tribunal has paid attention to cultural concerns. This case highlighted the conflict of cultures between the protection of cultural heritage and the promotion of foreign investment.

> territory, each State Party to this Convention shall endeavor, in so far as possible, and as appropriate for each country: (…)
> (d) to take the appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation of this heritage.

Then, this section going to discuss about the conflicts between investment activities and biodiversity protection. Biodiversity or biological diversity refers to the variability, including genetic diversity, among living organisms from all sources.[119] Biodiversity conservation is vital to the development of both the biotech and ecotourism industries.[120] In *Allard v. Barbados*,[121] an ecotourism investor filed a claim against Barbados in connection with the protection of a natural wetland's ecosystem.

Mr. Allard, a Canadian investor, purchased about 34 hectares of wetlands (the Sanctuary) in Barbados between 1996 and 1999 to develop an ecotourism attraction in Barbados (para. 33). He obtained permission to develop the Sanctuary in 1998 and submitted environmental management plans as required by the permission (paras. 37- 41). The Sanctuary was opened to the public in 2004. In 2017, due to the nearby sewage treatment plan, the Sanctuary was discharged of raw sewage. Consequently, Mr. Allard tried to sell the attraction (paras. 42-4). Finally, the Sanctuary closed in 2009.

In 2010, Mr. Allard filed an arbitration against Barbados under the Canada-Barbados BIT. He claimed that Barbados failed to enforce its sewage discharge and poaching laws, and failed to take other specific actions to prevent the silting of the wetlands,

---

[119] Article 2, 1992 United Nations Convention on Biological Diversity.
[120] *Anastasia Telesetsky, International Investment Law and Biodiversity, in* Kate Miles, *supra* note 83, p.132.
[121] *Peter A. Allard v. The Government of Barbados,* PCA Case No. 2012-06, UNCITRAL, Award (27 June 2016).

leading to a damage to the Nature Sanctuary.[122] According to Mr. Allard, the profitability of his investment was reduced as a result of state's actions and omissions which severely damaged the investor's properties invested in building an ecotourism centre.[123] Specifically, the investor refers to Barbados' obligations under the Biological Diversity Convention and the Ramsar Convention in accordance with which Barbados designated the Nature Sanctuary as a "wetland of international importance".[124]

The investor alleged that the actions and inactions of state failed to mitigate a significant degradation of the environment and thereby depriving him of the entire benefit of his investment in Barbados (para. 50). The investor alleged that the actions and omissions of the state would amount to a breach of the fair and equitable treatment, full protection and security, and expropriation as enshrined in the Canada-Barbados BIT.[125] Regarding the fair and equitable treatment, the investor also claimed that Barbados adopted a new National Physical Development Plan in 2008 that revoked that formed the basis for his original investment in the wetlands as an ecotourism destination.[126] The Claimant argued that "Barbados environmental treaty obligations confirmed and reinforced the specific representations made by Barbados to Mr. Allard (para. 198)". The Claimant suggested a

[122] *Peter A. Allard v. Government of Barbados,* Notice of Dispute, (8 September 2009), para. 14.
[123] *Ibid.,* para. 16.
[124] *Allard v. Barbados, supra* note 121, para. 178.
[125] *Allard v. Barbados, supra* note 122, paras. 14-21.
[126] *Ibid.,* paras. 17-20.

series of “reasonable measures” that Barbados should have taken and contended that Barbados’ obligations under the Convention on Biological Diversity and the Ramsar Convention increased the level of diligence required (paras. 230-234).

Barbados contended that it took all proper environmental steps to protect the integrity of the site. With respect to the Claimant’s reliance on the Convention on Biological Diversity and the Ramsar Convention, the Respondent contended that it had complied with its obligations under these treaties (para 190).

The tribunal identified six aspects of environmental health namely water salinity, other parameters of water quality, the health of the mangroves, the diversity and health of fish, the diversity and number of birds, and the number of crabs. According the evidence submitted by the Claimant regarding to these aspects, the tribunal found that the Claimant failed to establish the burden of proof. Consequently, the Claimant’s decision to close the Sanctuary could not be attributed to the degradation of the environment. Consequently, the Claimant’s claims were dismissed (paras. 138,139).

In spite of the failure of the Claimant’s case on the facts, the tribunal analysed the relations between the application of environmental law and substantive protections of the BIT. Regarding the FET, the tribunal considered this protection standard as a legitimate expectation. The tribunal found that Barbados had made no “specific representations” that it would take any “specific steps with regard to the environmental protection of the Sanctuary”

(para. 208). The tribunal found that none of the specific representations alleged by the Claimant were capable of giving rise to legitimate expectations (para. 208). A state's "due diligence" under a BIT is restricted to "reasonable actions", not "specific step" to protect the private investor's wildlife sanctuary (paras. 243-4). The tribunal thus considered it needless to examine Barbados's international obligations as these were only offered in support of the specific representations alleged to have been made (para. 208).

In respect of the full protection and security, the tribunal determined that the component of this standard only required the state to take "reasonable actions", not "specific steps that an investor asked for it" (para. 244). The Tribunal found that the measures taken by Barbados to prevent environmental damage to the Sanctuary fulfilled the due diligence standard required by the FPS obligation. The Tribunal emphasised that the issues surrounding the Sluice Gate involved a wide range of stakeholders, beyond the investor, as they impacted the hydrology of a wider area (paras 245-250). The FPS obligation was limited to taking reasonable action and did not require the host state to take specific steps which an investor asked of it. Furthermore, Barbados' obligations under other environmental treaties did not change the FPS standard but could 'be relevant in the application of the standard to particular circumstances (para 244).

With respect to expropriation claim, the tribunal found that the café at the Sanctuary had continued and the Claimant was not deprived of his entire investment in Barbados. In

addition, the tribunal determined that the Claimant's failure to establish environmental degradation on the facts excluded the expropriation claim (paras. 264-5). This case was noteworthy because a private Claimant convinced the tribunal that a state has been neglected in its duty to implement its own environmental law to the harm of the investor's wildlife sanctuary. In the earlier cases, the Claimants have complained about the interference with their investment caused by state's environmental regulations. Although the investor lost in this case, the question of whether the state has an obligation to implement its domestic environmental laws as part of its investment assurances occurred.[127] As regards the state's international environmental obligations, the tribunal considered that these obligations did not change the standards under the BIT although it may be relevant to particular circumstances (para. 244). The case analysis illustrates the relationship between protection of biodiversity and international investment schemes. It is noted that the state has international obligations in application of investment protection standards to particular circumstance for protection of biodiversity. However, the fact that the Barbados is a party to the Convention on Biological Diversity and the Ramsar Convention does not change the standard under the BIT

[127] MILES, *supra* note 83, p.139.

.

2.3.3. Summary

This section illustrated that the investment tribunals interpreted the investment protection standards in environment-related investment sectors. The consideration of the adverse impact of investment activities in different sectors in international investment arbitration varied from the case by case. It can be learned that all international investment arbitration tribunals have not neglected negative effects related to foreign investors' activities when assessing whether a measure had breached a host state's obligations under an IIA. The tribunals demonstrated awareness regarding the right of Respondent states to adopt regulatory measures that seek to limit the negative impact of foreign investors' activities. In doing so, the MEAs and the national environmental legislation laws have been mainly discussed by the tribunals.

Section 2.3.1 examined the conflicts between investment protection standards and environmental protection rules in the mining sector. *Al Tamimi* tribunal expressly considered the state's defence of national mining regulations that seek to protect the environment. The tribunal underlined the trend that environmental concerns in the mining sector are gaining more space in the reasoning of investment tribunals. The *Bilcon* tribunal found that a breach of national mining regulations by a host state can amount to a breach of legitimate expectations and resulted in a breach of investment protection standard under IIA. Due to the adverse environmental effects, the mining sector had been subject to investment

arbitration. The conflicts in the mining sector indicated that the states have to ensure that foreign investment aligns with environmental protection measures.

In the protection of the cultural heritage sector, cultural heritage-related investment disputes emerged in investment tribunals. In the case of *SPP*, the host state may lawfully regulate and/or expropriate private property to protect cultural heritage. The tribunal paid attention to cultural concerns. The tribunal directly applied the relevant principles and rules of international law and considered the provisions of MEAs such as WHC. The applicability of domestic environmental law was discussed to some extent. The priority of international environmental law over domestic investment disciplines was impliedly assessed by this tribunal.

In the context of biodiversity protection, the *Allard* tribunal discussed that the state's environmental obligations for the protection of biodiversity did not change the standards under the BIT although it may be relevant to particular circumstances. The fact that Barbados is a party to the Convention on Biological Diversity and the Ramsar Convention did not change the standard under the BIT. This case was also notable in the biodiversity protection sector since a private investor claimed that a state failed to implement its own environmental law to the harm of the investor's wildlife sanctuary.

2.4. Brief Summary

This chapter discussed the investment protection provisions under IIAs in the context of issues in environment-related investment. The first section examined the NT, MFN, FET, and expropriation in investment disputes involving environmental issues. The section highlighted that core investment protection standards may be used to challenge measures introduced by host states to protect the environment. The case analysis illustrated that international investment protection standards operate in practice can indirectly constraint the enforcement of environmental protection regulations of the state. The second section of the chapter analysed the application of the precautionary principle in investment arbitration. The section examined the scientific evidence for the assessment of environmental risk and the burden of proof. The violation of the concepts of the precautionary principle would give rise to a separate claim for breach of investment protection standards**.** If environmental justification measures set forth by the host state are based on scientific evidence, an investment tribunal will consider the precautionary approach in investment arbitration. The investment tribunals clarified the notions of investment protection standards under IIAs by applying the significance of the precautionary principle. In an investment dispute brought by the investor, the state could rely on its national measures on the precautionary approach. The precautionary principle becomes a conceptual basis for the adopted measure. Even precautionary measures are reflected under the investment protection standards, investors, host states, and international investment tribunals could show greater deference in this

context. These substantive and procedural aspects of the precautionary principle play an important role in reaching a balance between investment protection and environmental protection.

The third section of the chapter discussed the negative impact of some investment-related projects in different sectors. It can be learned that investment tribunals have not neglected negative effects related to foreign investors' activities when assessing whether a measure had breached a host state's obligations under an IIA. The tribunals demonstrate awareness regarding the right of Respondent states to adopt regulatory measures that seek to limit the negative impact of foreign investors' activities. However, it can be construed that current investment protection standards are not adequately taken into consideration of the negative impact of the activities in different environment-related investment sectors.

As a whole, this chapter examined the topic of environmental protection under IIAs in the context of environment-related investment. The discussions in this chapter indicated that investment tribunals recognised the issues of environment-related investment. It also noted that states have been trying to strike a proper balance between investment protection and environmental protection.

Chapter III. The Balance between Foreign Investment Protection and Environmental Protection in Myanmar

Introduction

International investment law focuses on three main categories in protecting the public interest: the protection of the environment, the protection of human rights, and the discouragement of certain illegal activities (e.g., corruption).[128] The protection of the public interest involves ensuring that international investment does not cause harm to the environment in a way that indirectly adversely affects people.[129]

The interfaction between international investment law and international environmental law has, by now, been developed so that the environmental resources of the host state are protected from the negative effects of environment-related investment activities. At the international level, the current challenge is to achieve a balance between domestic, regional, and global interests, and between the legitimate interests of economic actors and legitimate environmental interests.[130] Therefore, this chapter examines whether international investment principles are sufficient to protect the competing rights of investors and the public under the current legal framework in Myanmar. The chapter considers how the nature of environmental protection affects international law for investment protection in Myanmar.

---

[128] ANDREAS KULICK, GLOBAL PUBLIC INTEREST IN INTERNATIONAL INVESTMENT LAW 225 (CUP, 2012).
[129] Alison Giest, *Interpreting Public Interest Provisions in International Investment Treaties,* 18 CHICAGO JOURNAL OF INTERNATIONAL LAW 321-352 (2017).
[130] SANDS & PEEL, *supra* note 65, p.926.

The richness of the natural resources in Myanmar has been the main factor in attracting foreign investors. Myanmar relies greatly on its natural resources to improve its economy, and most of its foreign direct investment (FDI) is directed towards extractive industries. Myanmar is making wide-ranging reforms to improve the monetary and fiscal benefits of trade and foreign investment, primarily in the extractive industries. An important share of foreign investment projects in Myanmar is likely to be based on extractive industries that exploit the nation's large-scale natural resources.

Recent FDI in Myanmar has been concentrated in the oil, gas, hydropower, and mining sectors,[131] most of which have adverse environmental and social impacts. The new government in Myanmar continues to take steps to exploit the energy resources by increasing foreign investment in the energy sector.[132] In general, mining, oil, and gas operations by transnational corporations (TNCs) may have negative effects on the environment. As foreign investment in extractive industries increases, so does the need to protect the nation's environment. Overexploitation of natural resources has led to widespread environmental degradation in Myanmar, such as deforestation, degradation of biodiversity and the land, and depletion of water resources.[133]

---

[131] Yearly Approved Amount of Foreign investment (by sector) for the fiscal year 2018-2019. https://www.dica.gov.mm/sites/dica.gov.mm/files/document-files/yearly_sector_6.pdf

[132] For instance, there are 53 onshore and 51 offshore oil and gas operations in Myanmar which are active in nearly every state and region. Win Maw, Deputy Director-General of Ministry of Energy, Presentation at the 32nd JCCP International Symposium, Tokyo: The Current Status and Future Vision of Oil and Gas Sector in Myanmar (January 2014).

[133] UNDP Myanmar, Annual Report 2015.

Consequently, domestic needs for environmental protection have been emerging in Myanmar. In the absence of effective environmental regulations and natural resource management, environmental degradation and resource depletion are increasing rapidly. On the other hand, environmental regulations conflict with investment protection provisions under Myanmar's investment law and investment treaties. This conflict can lead to foreign investors filing investor-state disputes before international investment arbitral tribunals. In this regard, Myanmar needs to conduct the first-ever study of the relationship between investment protection and the country's environmental protection. Myanmar needs to prepare for potential investor-state disputes since foreign investment in the environmental sectors in Myanmar has been increasing. Under the current investment legislation, foreign investors can start an international investment arbitration. Myanmar may need to act as a Respondent under the ISDS if an investor thinks that the state's measures to protect the environment breach the investment protection measures.

In Myanmar, environment-related investment is limited to receive specific protection from investment laws and investment treaties. Myanmar's current system is not ready to resolve conflicts between investment protection and environmental protection. Myanmar needs to bring in more environmental protection measures under its international commitments to prevent the adverse effects of environment-related investment. When it does this, foreign investment protection provisions under Myanmar's investment legislation may

be affected. A balance is needed between investment protection and environmental protection.

This chapter aims at providing information relating to the balance between investment protection and environmental protection in international investment law and Myanmar law. It also makes suggestions for how Myanmar can provide the necessary protection for foreign investments as well as the country's environment. The chapter will make an analysis of whether the current legal framework in Myanmar can strike a balance between investment protection and environmental protection.

The chapter will first examine the current legal framework for investment protection in Myanmar (Section 3.1). The purpose of the section is to assess the current legal instruments and institutions in Myanmar that are relevant to the protection of investment and investors' responsibilities. The chapter will also examine Myanmar's current stance towards the provisions in international investment agreements (IIAs) relating to environmental protection. It will then point out the need for investment legislation in Myanmar to cover environment-related investment activities. The section will also consider how Myanmar should prepare for potential investor-state disputes in international investment tribunals by studying the experiences of one of the member countries of the Association of Southeast Asian Nations (ASEAN).

Myanmar also needs to review its current legal framework for environmental legislation as it relates to foreign investment activities (Section 3.2). This section will examine

environmental protection provisions in national and international environmental legislation. International arbitration cases dealing with the conflicts between investment protection and the protection of the environment will be studied in this chapter (Section 3.3). Finally, the chapter identifies the key challenges and makes some suggestions for legal reforms in Myanmar that will strike a balance between investment protection and environmental protection (Section 3.4).

3.1. Legal framework for investment protection in Myanmar

This section argues that the investment protection provisions under the Myanmar Investment Law (MIL) and Myanmar's Bilateral Investment Treaties (BITs) and Regional Investment Treaties (RITs) are not sufficient to address the changing aspects of environmental protection in Myanmar. This section will review the foreign investment protection provisions of the MIL and other relevant legislation in Myanmar. It will then give an analysis of investment protection provisions under the IIAs to which Myanmar is a party and Myanmar's current BITs. Each parts of the section will underline how the investment protection provisions under the current investment legislation relate to environmental protection issues. In doing this, this section studies international practice in this field. Since Myanmar is a member of ASEAN, the practices of Indonesia, which is also a member of ASEAN, will be studied as a comparison.

3.1.1. Investment protection provisions under Myanmar's investment legislation

Myanmar has enacted legislation and brought in policies and procedures that aim to improve foreign investment and protect the public interest. According to the Constitution, the Union must strive to improve the living standards of the people and the development of investment.[134] Concerning the protection of the public interest, the Union must protect and conserve the natural environment.[135] Every citizen has to assist the Union in carrying out the preservation and safeguarding of the cultural heritage, conserving the environment, striving for the development of human resources, and protecting and preserving public property.[136]

Recently, the Myanmar government has brought in some reforms to reduce the political and legal risks of the foreign investment regime. According to surveys carried out in 2012, foreign investors are worried about investment facilitation, investor protection, and the legal system in Myanmar.[137] To gain the trust of investors, the Myanmar government has reviewed its investment law and policy. In 2016, the Myanmar government laid down an economic policy[138] and announced that it would formulate specific policies to increase foreign investment. Consequently, the new MIL was enacted in 2016.[139] The MIL replaced the Foreign Investment Law 2012 and the Myanmar Citizens Investment Law 2013.[140] The

---

[134] Article 36 (c) of the Constitution of the Union of Myanmar, 2008.
[135] Article 45 of the Constitution of the Union of Myanmar, 2008.
[136] Article 390 of the Constitution of the Union of Myanmar, 2008.
[137] Sufian Jusoh, *Myanmar's Investor- State Dispute Settlement Experience and Investor Grievance Mechanism, in* Carlos Esplugues, eds., FOREIGN INVESTMENT AND INVESTMENT ARBITRATION IN ASIA 205-226, p.207 (Intersentia, 2019).
[138] Economic Policy of the Union of Myanmar, 29 July 2016.
[139] Myanmar Investment Law, Pyidaungsu Hluttaw Law No. 40/2016, 18 October 2016.
[140] The Foreign Investment Law 2012 and the Myanmar Citizens Investment Law 2013 do not have investment protection provisions that are consistent with international standards.

MIL is the dominant legislative framework that aims to protect the rights and ensure the performance of the duties, of investors.

Many other investment-related laws have also been enacted in Myanmar. Current laws applying to investment activities include the Myanmar Forest Law 2018, the Conservation of Biodiversity and Protected Areas Law 2018, the Myanmar Companies Law 2017, the Competition Law 2017, the Arbitration Law 2016, the Law Amending Myanmar Mines Law 2015, the Employment and Skill Development Law 2013, and the Environmental Conservation Law 2012. For entities doing business in Myanmar under the existing laws, the government has strengthened the applicable environmental and social standards under the provisions of the Environmental Conservation Law 2012.

The new MIL has been given special importance by the government of Myanmar, which intends to keep pace with the economic growth of neighbouring ASEAN countries.[141] Among the ASEAN countries, Indonesia is a key member and is a country rich in natural resources. The extraction of natural resources, through activities such as mining, has attracted much of Indonesia's foreign investment.[142] The development of a legal regime for foreign investment in Indonesia has been moving forward. Since 1998, Indonesia has liberalised its legal regime on foreign investment in both its national and its international regimes. Its legislation on foreign investment mainly focuses on foreign investment protection.

[141] Myanmar became a member of ASEAN on 23 July 1997.
[142] Huala Adolf, *Indonesia, Foreign Investment and Investment Arbitration, in* Carlos Esplugues, eds., *supra* note 137,101-123, at102.

Indonesia has concluded numerous BITs with countries around the world to give greater guarantees of the protection of foreign investment.[143] Among the Respondents to ISDS claims against ASEAN states,[144] Indonesia has been a Respondent in six major international investment disputes brought under international arbitration.[145] Some of these cases were related to the revocation of investment permits for reasons related to the environmental protection of the state. As a member of ASEAN and a country that is rich in natural resources, Myanmar should learn from Indonesia's experience under the national and international legal regimes for foreign investment protection and environmental protection.

In Myanmar, the MIL covers both domestic and foreign investment, following the recommendations of the OECD policy framework for investment.[146] The objectives of the MIL are to protect foreign investment and develop responsible investment that does not cause harm to the natural environment or the social environment.[147] In Indonesia, Chapter II of the Investment Law[148] sets out both principles and objectives. One of these principles is that the implementation of capital investment must be based on the principles of

---

[143] *Ibid.,* pp.106-107.
[144] ASEAN member states had attracted a total of 33 known ISDS claims as of 28 February 2017. Luke Nottage, Julien Chaisse and Sakda Thanitcul, *International Investment Treaties and Arbitration Across Asia: A Bird's Eye View*, *in* Julien Chaisse & Luke Nottage, eds., INTERNATIONAL INVESTMENT TREATIES AND ARBITRATION ACROSS ASIA 3-56, p.31(Brill Nijhoff, 2018).
[145] Martina Francesca Ferracane, *Investor-State Dispute Settlement (ISDS) Cases in the Asia-Pacific Region – The Record*, *in* Julien Chaisse, Tomoko Ishikawa, Sufian Jusoh, eds., ASIA'S CHANGING INTERNATIONAL INVESTMENT REGIME: SUSTAINABILITY, REGIONALIZATION, AND ARBITRATION 229-242, p.241 (Springer, 2017).
[146] OECD Investment Policy Review: Myanmar, OECD (2014).
[147] Article 3 of MIL.
[148] Indonesian Law No. 25 of 2007 on Capital Investment (Investment Law).

consideration for the environment.[149] Again, as one of the criteria, investment facilities may be given to investors who preserve the living environment.[150]

In Myanmar, the MIL requires the protection of investors and of the public interest, including the environmental protection of the state. Even though the MIL does not explain the term "public interest", the term "contrary to national interest or public policy" is defined as follows: "contrary to national interest or public policy means the harmful impact on the natural environment in state-owned land, water or atmosphere, the public, and the national cultural heritage".[151] Thus, the protection of the environment plays a significant role in the protection of the public interest in Myanmar.

In terms of investment protection, the MIL adopts internationally accepted practices as mentioned in the ASEAN Comprehensive Investment Agreement (ACIA).[152] Regarding the substantive treatment of investors, the MIL offers national treatment (NT),[153] most favoured nation treatment (MFN),[154] and fair and equitable treatment (FET).[155] Also, in Indonesia, Chapter II of Indonesia's investment law provides for equal treatment for all investors, regardless of their country of origin, who undertake investment activities in

[149] Article 3 (1) (h) of the Indonesian Investment Law.
[150] Article 18 of the Indonesian Investment Law.
[151] Article 2 (e) of the Notification No. 643/2018 of the Supreme Court of the Union of Myanmar.
[152] Myanmar is a member of the ACIA: this was declared in 2009 and came into force in 2012.
[153] Section 47 (a) of MIL.
[154] Section 47 (b) of MIL.
[155] Section 48 of MIL.

Indonesia under the prevailing laws and regulations.[156] Again, under the title of "Rights of the Investors", Article 14 of the law provides: "Each investor is entitled to the certainty of rights, law and protection; transparent information on the business sectors being operated; rights to service; and all facilities under prevailing laws and regulations".

Both the Indonesian investment law and the MIL provide that investors have investment protection in their territories. It is necessary to examine how this treatment can be efficiently applied in settling conflicts between investment protection and environmental protection. For this section, only the FET will be considered, since this provision is frequently raised by foreign investors in environment-related investment disputes.

While the MIL provides for the protection of investments, investors, on the other side, have certain positive obligations to protect the environment. The concept of responsible investment is an essential aspect of ensuring a balance between investor protection and the public interest. The MIL aims to develop responsible investments that do not cause harm to the natural environment or the social environment, in the interests of the Union and its citizens.[157] Investors have to abide by the applicable laws, rules, procedures, and best standards practised internationally in relation to their investment, so as not to cause damage, pollution, or loss to the natural and social environment or damage to the cultural heritage.[158] Regarding the responsibility for the protection of the environment, the investor must obtain,

[156] Article 6 (1) of the Indonesian Investment Law.
[157] Section 3 (a) of MIL.
[158] Section 65 (g) of MIL.

in advance, a permit or an endorsement of the commission for those investments for which prior approval is needed under the Environmental Conservation Law and the Environmental Impact Assessment (EIA) procedures.[159] The Myanmar Investment Rules also instruct the Myanmar Investment Commission (MIC) [160] to consider whether investors have demonstrated a commitment to responsible investment. The investment rules explicitly mention the environment-related provisions. For a project that is likely to have a large impact on the environment and the local community, the investor must submit a proposal to the MIC.[161] The MIC may issue a permit to the investor involved in the investment.[162] If an investor has violated environmental protection standards, the MIC should not grant it a permit. The MIC must revoke the permit if it is known that a prohibited investment is being made.[163] In the case of investment activities that may have a significant impact on the environment and national interests of the Union, the MIC must obtain the approval of parliament before issuing a permit.[164]

Regarding responsible investment in Indonesia, each investor is obliged to implement the principles of good corporate governance, and to meet its corporate social

[159] Section 65 (q) of MIL and Article 190 of Myanmar Investment Rules.
[160] MIC was formed under Chapter IV of MIL.
[161] Section 36(c) of MIL.
[162] Section 25 (c) of MIL and Article 50 of Myanmar Investment Rules.
[163] Article 16 (c) of Myanmar Investment Rules. Under section 41 of MIL, prohibited investments include investment activities that may bring or cause hazardous or poisonous waste into the Union or may cause an enormous harmful impact on the natural environment and ecosystem.
[164] Section 46 of MIL.

obligations.[165] In addition, investors that manage renewable natural resources must allocate funds progressively for the preservation of the area to attain the environmental standards required by the prevailing laws and regulations.[166]

Recently, environment-related Corporate Social Responsibility (CSR) provisions have been more frequently incorporated into both investment treaties and trade agreements. For instance, Chile–US FTA contains articles within its Environment Chapter entitled "Principles of Corporate Stewardship":[167]

> *Recognizing the substantial benefits brought by international trade and investment as well as the opportunity for enterprises to implement policies for sustainable development that seek to ensure coherence between social, economic and environmental objectives, each Party should encourage enterprises operating within its territory or jurisdiction to voluntarily incorporate sound principles of corporate stewardship in their internal policies, such as those principles or agreements that have been endorsed by both Parties.*

Similarly, Article 32 (CSR) of Norway's Model BIT 2007 requires the Parties to:

> *agree to encourage investors to conduct their investment activities in compliance with the OECD Guidelines for Multilateral Enterprises and to participate in the United Nations Global Compact.*

---

[165] Article 15 of the Indonesian Investment Law.
[166] Article 17 of the Indonesian Investment Law.
[167] United States–Chile Free Trade Agreement, June 6, 2003, Article 19.10.

Generally, corporate entities are encouraged to apply CSR and states are obliged to encourage the adoption of CSR standards. Under the OECD Guidelines for Multilateral Enterprises, corporations are encouraged to maintain an environmental management system that includes monitoring impacts, adopting effective technologies, and providing environmental education to employees and customers.[168]

In Myanmar, the MIL does not use the term "corporate governance", which is mentioned in Indonesia's investment law, but it still imposes obligations on investors including obligations in respect of environmental protection. Myanmar companies and foreign companies established under the Myanmar Companies Law 2018 are required to undertake responsible investment that does not cause harm to the natural environment or the social environment. Besides, CSR provisions can be found in current BITs such as the Singapore–Myanmar BIT, the Korea–Myanmar BIT, and the Japan–Myanmar BIT.[169] Early BITs have no such provisions. To strike a balance between investment protection and public interest protection, Myanmar BITs should contain more CSR provisions that follow the OECD Guidelines for responsible investment.

In Indonesia's national legal regime for investment, the recent Investment Law 2007 and numerous relevant laws have been enacted to provide favourable treatment for foreign

[168] OECD Guidelines for Multilateral Enterprises 43-44 (OECD Publishing, 2011).
[169] For instance, under Article 27 of the Singapore–Myanmar BIT, Article 8 of the Korea–Myanmar BIT, and Article 8 of the Japan–Myanmar BIT, "Transparency" provides that the countries must give information about the laws, regulations, administrative rulings, and international agreements pertaining to investment activities.

investment. Under the recent positive changes in investment policy, Indonesia has opened more sectors to foreign investment.[170] In Indonesia, some foreign investment is targeted at the mining sector. In order to prevent negative effects on the environment of the country, Indonesia has enacted many environmental laws, including mining laws. However, because of the severe environmental degradation that has occurred in the mining sector, the government has imposed environmental and mining obligations upon foreign investors.[171] In this regard, conflicts between environmental protection and investment protection have occurred in the mining sector, and several mining companies have lodged ISDS claims against Indonesia. Under the current Indonesian BITs, investors have the right to bring investor-state disputes to international arbitration. Indonesia has signed 67 BITs with countries around the world.[172]

Indonesia has been a Respondent in at least six major investment disputes brought before international arbitration, and it has lost in most of them. As a result of the financial and reputational consequences, Indonesia cancelled 22 BITs in 2016.[173] However, as a member of ICSID and the ACIA, Indonesia is still obliged to agree to ICSID arbitration.[174] Myanmar

[170] Adolf, *supra* note 142, p.106.
[171] Tineke Lambooy, Iman Prihandono, and Nural Barizah, *Foreign Direct Investment in the Mining Industry in Indonesia: Disputes Concerning Environmental Degradation and Pollution*, *in* Yulia Levashova, Tineke Elisabeth Lambooy, I. F. Dekker, eds., *supra* note 105, 383-440, p.384.
[172] Adolf, *supra* note 142, p.106.
[173] *Ibid.,* p.107.
[174] *Ibid.,* p.115.

has been involved in only one ISDS case[175] arising from the 1987 ASEAN Investment Agreement, which has now been replaced by the ACIA.

However, there have so far been no ISDS cases against Myanmar that involve environmental concerns. Since Myanmar and Indonesia have similar conditions for their natural resources extraction sectors, Indonesia's experience will be helpful for Myanmar. Myanmar is required to prepare for potential investor-state disputes under the dispute settlement provisions of the MIL and its current BITs.

Among the six major investment disputes faced by Indonesia, *Churchill Mining v. Indonesia*[176] was related to conflicts between investment protection and environmental protection in the mining sector. The case concerned claims arising out of the unilateral revocation by the government of mining licences in which the Claimants held an interest. In this case, the Claimants argued that Indonesia had breached its obligations under the Indonesia–UK BIT including the obligation to give FET (breach of legitimate expectations) and to give protection against expropriation, and that the investors had carried out due diligence.

In 2008, the British company Churchill Mining PLC invested, in the name of Ridlatama Group, in Indonesia's mining sector. The Group planned to conduct the East Kutai Coal Project (EKCP) jointly with Indonesian companies. The Group obtained coal mining

[175] *Yaung Chi Oo Trading Pte Ltd., v. Government of the Union of Myanmar,* ASEAN I.D. Case NO. ARB/01/1, Award (31 March 2003).
[176] *Churchill Mining Plc. And Planet Mining Pty Ltd., v. Republic of Indonesia*, ICSID Case No. ARB/12/40 and 12/14, Award (6 December 2016).

concessions from the local government in Kalimantan to provide mining services in an area of about 35,000 hectares.

Various environmental laws, including specific mining laws, were enacted in Indonesia to protect the environment and communities. Indonesia promulgated Law No. 4 of 2009 concerning the Mining of Mineral and Coal, together with the implementing regulations No. 23 of 2009. This law adopted a new system of licensing and abolished the previous licensing regime (para. 31 of the decision on jurisdiction). In the management of minerals and coal mining, the provincial government had the authority to issue and revoke permits.[177]

In 2010, the local government revoked four of the coal mining licences of the Group because (1) the Ridlatama companies were operating without permission from the Ministry of Forestry; (2) the Ridlatama licences were allegedly forged; and (3) the Ridlatama licences overlapped with other permit areas (para. 35 of the decision on the jurisdiction). The main reason was that the concession covered protected forest areas, which required approval from the Ministry of Forestry. The Financial Auditor Body pointed out that the four coal mining licences were illegal because they had not been registered, and it raised the issue that there were indications of forgery (para. 524).

In response to the revocation of the mining licences, the Group filed four lawsuits before the local courts, requesting the annulment of the administrative decisions of the local government. The Claimants alleged that they had obtained the licences lawfully through their

[177] Article 7 and 163 (2) of Mineral and Coal Mining Law 2009.

partnership with a local group of companies, and therefore that the revocations were illegal. The court rejected the claims and ruled in favour of the government. After having lost the cases in the Indonesian courts, the Claimants filed requests for an ICSID arbitration, based on the Indonesia–UK BIT. The Claimants alleged that Indonesia had violated the legitimate expectations component of the principle of FET by annulling the mining licences (para. 224). They alleged that the revocation of the various mining licences by the local government constituted a failure of the Indonesian government to provide foreign investment protection.

During the arbitration, Indonesia disputed the validity of the mining licences at issue. Indonesia raised allegations of forgery and argued that some of the licences on which the Claimants relied had been forged by the Claimants themselves and by the Claimants' Indonesian partner. The Claimants, on the other hand, alleged that they had acted in good faith. Indonesia alleged that the Claimant's lack of due diligence contradicted any claim based on legitimate expectations (para. 171).

According to the Indonesia–UK BIT, investments by nationals or companies of either Contracting Party must at all times be accorded fair and equitable treatment in the territory of the other Contracting Party (Article 3 (2)). Again, investments of nationals or companies of either Contracting Party must not be nationalized, expropriated, or subjected to measures having an effect equivalent to nationalization or expropriation in the territory of the other Contracting Party, except for a public purpose related to the internal needs of the expropriating party and the subject to compensation (Article 5 (1)).

The tribunal considered that Indonesia had to provide sufficient evidence to sustain its allegations (para. 238). Based on the evidence, the tribunal assessed that there was no evidence that there had been any official application for a licence for the project, and that, out of the 34 documents, others were not registered. Indonesia disputed the authenticity of the 34 documents including four main survey licences, four exploration licences, and other ancillary documents (para. 108). The tribunal found that four main survey licences namely PR RTM, PT RTP, PT INP, and PT IR were not authentic (paras. 353 and 359). Finally, the tribunal decided that the 34 disputed documents were not authentic and unauthorized (para. 557 (2)). The tribunal indicated that investment tribunals require investors to exercise a reasonable level of due diligence, especially when investing in risky business environments (para. 506). The tribunal then found that "a fraudulent scheme permeated the Claimants' investments in the EKCP" (para. 507). The tribunal concluded that claims arising from rights based on fraud or forgery are inadmissible as a "matter of international public policy" (para. 508). The tribunal held that the Claimants had not acted with due diligence but, instead, had been negligent when they had inquired into the processes through which their Indonesian partners had secured the mining licences (paras. 517–527). Such a lack of diligence barred the protection under the FET and expropriation provisions of the Indonesia–UK BIT.

In its final award, the tribunal determined that the claims were effectively "based on documents forged to implement a fraud aimed at obtaining mining rights" and that all the claims were inadmissible (para. 528). The Indonesian government was successful in proving

that 34 of the documents submitted by the Claimants were false documents. The tribunal indicated that it was likely that the local business partner of the Claimants was the source of the fraudulent conduct, but that the Claimants had failed to exercise sufficient due diligence in carrying out their investment. The ICSID annulment panel agreed with the Indonesian government's argument. The tribunal found that the Claimants had not met their obligation to oversee their local partners and oversee the licensing process (para. 163, the decision on annulment). The ICSID ruling reaffirmed the fact that the Indonesian government had not committed any violation.

This case is one of the international investment arbitration claims filed by foreign mining companies against the Indonesian government. In this case, the Claimants relied on the investment protection provisions of the applicable BIT, to contest the rejection of the mining licence or combat the new mining regulation. The government's new stance towards FDI and BITs can be seen as an attempt to balance its conflicting tasks in seeking to protect the environment as well as the rights of foreign investors. In Indonesia, Chapter II of Indonesia's investment law provides equal treatment for all investors, regardless of their country of origin, who undertake investment activity in Indonesia under the prevailing laws and regulations.[178] We can learn from the case that investors need to exercise sufficient due diligence if they are to obtain protection under the FET standard. Even though the FET provisions under the Indonesia–UK BIT and the Indonesian Investment Law were not

[178] Article 6 (1) of the Indonesian Investment Law.

explained in detail, the tribunal considered that the concept of due diligence was critical in interpreting the FET standard. From this case analysis, we can learn that, as a developing country with abundant natural resources, Indonesia made laws and regulations to strike a balance between investment protection and environmental protection. The arbitration tribunal applied the existing legal jurisprudence of Indonesia and affirmed a balance between protection of the public interest and investment protection.

One lesson learned from analysing this case is that foreign investors can file ISDS cases based on the applicable BIT to challenge the rejection of a licence under the environmental legislation of the host state. Under BITs, foreign investors have a legal mechanism, international investment arbitration, by which they can contest the enforcement of environmental legislation. Since the extraction sectors are similar in Myanmar and Indonesia, Myanmar has to be prepared for potential ISDS cases in international tribunals. Currently, in Myanmar, foreign investors have the right to refer disputes with state entities to dispute settlement.[179] If foreign investors wish to claim damages arising from a breach of the investment protection standards relating to an environment-related investment, they may

[179] Chapter XIX of MIL. If an investment dispute cannot be settled amicably, it shall be settled in the competent court or the arbitral tribunal under the applicable laws (section 84 (a) of MIL). In line with its investment objectives, the MIL has provided arbitration-friendly jurisdiction. Myanmar Arbitration law 2016 allows both domestic arbitration and international arbitration (section 3 (h) and (i) of Arbitration Law).

offer to bring the case before international arbitration as provided in the relevant investment treaty.[180]

Another lesson learned is that a state's regulatory reforms for the protection of the environment may affect investment protection standards such as FET under BITs. As discussed above, Indonesia enacted specific new mining laws and regulations to protect the environment and local communities. This new system for scrutinizing mining licences brought the previous licensing regime to an end. In this regard, the investors alleged that the revocation was illegal, and that Indonesia had violated the principle of FET. The case shows that the Indonesian government did provide fair and equal treatment for foreign investors. However, the investor's lack of due diligence did not allow it to claim the protections under the FET standard of the applicable BIT. In the case of Myanmar, regarding FET, investors have the right to obtain relevant information on any measures or decisions that have a significant impact on the investor and their direct investment, the right to due process under the law, and the right to appeal on similar measures, including any change to the terms and conditions under any licence, permit or endorsement granted by the government to investor for their direct investment.[181] It can be seen that the FET provision under the MIL is wider than the provisions under Indonesian investment law. The FET provision under the MIL gives a detailed explanation of the rights of investors. However, regarding FET, Myanmar needs

[180] Myanmar became a member of the New York Convention in 2013. Myanmar is not a member of the ICSID Convention.
[181] Section 48 of MIL.

to analyse the FET and expropriation provisions under its current BITs and IIAs (Section 2.2 of this paper) and investment disputes involving environmental issues (Section 3.2). After analysing FET and expropriation in Chapters 2 and 3, this paper will make some suggestions for the modification of these provisions in the conclusion (Chapter 4).

Another lesson learned comes from the fact that the authority to grant mining licences has been conferred on the local governments in Indonesia. In Myanmar, local governments have not received the authority to revoke mining licences. However, the relevant ministries have the authority to issue permits according to the existing laws and regulations. For instance, the Ministry of Natural Resources and Environmental Conservation (MNREC) can, with the consent of the Union government, grant a permit to carry out mining operations.[182] If the holder of the permit fails to comply with any orders or directives or contravenes any of the terms of the permit, the person issuing the permit may pass any administrative order including cancelling the permit.[183] Again, under Forest Law 2018, the MNREC may grant a permit for extraction of forest produce on a commercial scale for three years.[184] If a person who has obtained permission to extract forest produce violates any condition of the permit, the person granting permission to extract forest produce may cancel the permit.[185]

[182] Section 7 of the Law Amending the Myanmar Mines Law 2015.
[183] Section 8 of the Myanmar Mines Law 1994.
[184] Section 19 of the Forest Law 2018.
[185] Section 34 (c) of the Forest Law 2018.

Since Myanmar has been making legal reforms to its environmental legislation, future legal reforms must be consistent with the investment legislation, but some regulations enacted by the relevant ministries and local governments for the protection of the environment may go against the provisions of investment protection such as FET.

The above-mentioned lessons for Myanmar should be taken into consideration when solving potential disputes with TNCs regarding their environmental performance in extractive industries in Myanmar. These lessons will be also useful in seeking a balance between the protection of the environment and the protection of the rights of foreign investors in Myanmar.

In summary, Section 3.1 highlights the fact that both Indonesia and the MIL identify the preservation of the living environment as one of the criteria for allowing investment. The Myanmar government is committed to promoting investment with a positive impact on the environment under the MIL and relevant laws and regulations.

In the context of the obligations of the investors, even though the phrase CSR is not used in the MIL, Chapter XVI of the MIL, headed “Responsibilities of Investors”, includes obligations for the protection of the environment. However, in the case of the management of renewable natural resources, the responsibility of investors to allocate funds for the preservation of the environment is not stated in the MIL. Myanmar needs to lay down more comprehensive CSR provisions in line with the OECD guidelines. Some suggestions for CSR provisions will be made in Section 3.4.

By studying the *Churchill Mining* case, Myanmar can learn some valuable lessons in preparation for striking a balance between investment protection and environmental protection. One other lesson learned from analysing this case is that foreign investors could file ISDS cases to challenge the revocation of a licence under the environmental legislation of Myanmar. As a result of the legal reforms to Myanmar's investment legislation, foreign investors have a legal mechanism, international investment arbitration, through which they can contest the enforcement of environmental legislation. As investment business activities in extractive industries usually have a substantial impact on the environment, Myanmar should take into consideration the state's regulatory reforms for the protection of the environment. These reforms may affect investment protection standards such as FET under the applicable BIT. The discussions in this session will be used in support of the suggestions made for how Myanmar can balance the protection of the environment against the protection of foreign investment.

3.1.2. Investment protection provisions under Myanmar's current BITs and IIAs

Investment treaties are important for increasing foreign investment.[186] From the standpoint of capital-exporting countries, BITs and FTAs offer protection from actions by the host state that constitute a threat to the investors' rights and interests. From the viewpoint of

[186] SANDS & PEEL, *supra* note 6565, p.900.

capital-importing countries, BITs and FTAs create incentives to invest in their countries.[187] The focus on BITs and FTAs is the protection and promotion of foreign investment. On the other hand, these mechanisms may have an impact to the host state to adopt certain protective measures on the environment. If the state takes environmental measures under its international environmental obligations, the protection against expropriation and other prohibited acts under the investment treaties may be affected.

The ACIA, to which Myanmar is a party, reflects not only investment protection but also environmental protection. The ACIA carves out from the treaty measures that are necessary to protect morals or to protect human, animal, or plant health.[188] Also, Myanmar is a party to other IIAs[189] signed as part of its membership in ASEAN that have provisions equivalent to those in BITs. Recently, Myanmar has been engaged in rule-taking in investment treaty negotiations.[190] Currently, Myanmar has the second smallest treaty network of all the ASEAN countries.[191] Myanmar has concluded thirteen BITs – with Singapore (2019), Korea (2014), Israel (2014), Japan (2013), the USA (2013), Indonesia (2013), India (2008), Thailand (2008), China (2001), Laos (2003),[192] Kuwait (2008), Vietnam

[187] RALPH H. FOLSOM, FOREIGN INVESTMENT LAW INCLUDING INVESTOR-STATE ARBITRATIONS IN A NUTSHELL 355 (West Academic Publishing 2nd ed., 2019).
[188] Article 17 of ACIA.
[189] ASEAN-China Agreement on Investment, the ASEAN India Agreement on Investment, the ASEAN-Korea Agreement on Investment, the ASEAN-Australia-New Zealand Free Trade Agreement, and the ASEAN-Hong Kong China SAR Investment Agreement.
[190] Jonathan Bonnitcha, *International Investment Arbitration in Myanmar: Bounded Rationality, but Not as We Know It*, *in* Julien Chaisse & Luke Nottage, eds., INTERNATIONAL INVESTMENT TREATIES AND ARBITRATION ACROSS ASIA 335-360, p.355 (Brill Nijhoff 2018).
[191] Myanmar has the second smallest treaty network of all ASEAN Countries.
[192] The BIT with Laos was terminated.

(2000),[193] and the Philippines (1998).[194] In comparison with the BITs of other developing countries, Myanmar's BITs are highly inconsistent.[195] A slight difference in the phrasing of the investment protection clauses from one BIT to another can lead to significant interpretative differences.[196] Regarding investment protection, core investment protection standards such as those relating to FET and expropriation in Myanmar's current BITs and the ACIA have to be discussed in connection with the protection of the environment.

3.1.2.1. Fair and equitable treatment (FET)

Most IIAs and BITs provide for FET for foreign investments. The FET provision of investment treaties is the provision most commonly invoked by foreign investors in investor-state arbitrations. Myanmar's current BITs all contain provisions requiring the host state to treat foreign investment fairly and equitably. Myanmar's early BITs do not clarify the phrase "fair and equitable", and the FET provision is not linked to international law. However, the Japan–Myanmar BIT 2013 mentions "treatment according to international law, including the fair and equitable treatment".[197] This implies that the FET standard of the BIT is a requirement of international law. The recent Singapore–Myanmar BIT refers to "treatment in

[193] The BIT with Vietnam was never ratified.
[194] https://www.dica.gov.mm/en/investment-agreements
[195] Bonnitcha, *supra* note 190.
[196] LORETTA MALINTOPPI & CHARIS TAN, INVESTMENT PROTECTION IN SOUTHEAST ASIA: A COUNTRY-BY-COUNTRY GUIDE ON ARBITRATION LAWS AND BILATERAL INVESTMENT TREATIES 235 (Brill Nijoff, 2017).
[197] Article 4 of Japan–Myanmar BIT.

accordance with the customary international law minimum standard of treatment of aliens[198] including the fair and equitable treatment".[199] It also clarifies that the obligation to provide FET includes the obligation not to deny justice in criminal, civil, or administrative adjudicatory proceedings, in accordance with the principle of due process.[200] The ACIA also links the FET standard to international law. It clarifies that the FET standard "requires each Member State not to deny justice in any legal or administrative proceedings in accordance with the principle of due process".[201]

Regarding FET, it should be noted that some Myanmar BITs have wider and more precise provisions than the provisions of the MIL.[202] Myanmar has a few BITs with the home states of foreign investors. In this regard, if a foreign investor from a country without a BIT files a case against the state in the local court, the application of the FET standard under the MIL may not be construed as widely as it would be construed under the BITs. For instance, if the MIC revokes the permission of an investor because of violations of environmental regulations, the investor may argue that the state has violated the investment protection and breached the FET standard.

As discussed in Section 3.1.1, in the *Churchill Mining* case the investor's lack of due diligence in relation to its request for mining licences meant that it could not claim protection

---

[198] The customary international law minimum standard of treatment of aliens refers to all customary international law that protects the economic rights and interests of aliens.
[199] Article 3 of Singapore–Myanmar BIT.
[200] *Ibid.*
[201] Article 11 (2) of ACIA.
[202] Section 48 of MIL.

under the FET standard of the Indonesia–UK BIT. We have seen that the FET provision under the MIL has a detailed explanation of the rights of investors. However, regarding FET, Myanmar needs to study international investment disputes in which there were environmental concerns. In some cases, international tribunals have tried to give a more specific meaning to the FET standard by formulating a general definition or description. In this connection, Myanmar needs to study international practice and the tribunals' consideration of the FET standard in connection with environmental legislation. Case analysis will be presented in the next chapter (in Section 3.2).

3.1.2.2. Expropriation

Expropriation of a foreign investor's property without adequate compensation is the most severe form of interference because all expectations of the investor are demolished.[203] The requirements for lawful expropriation are public purpose, non-discrimination, and prompt, adequate, and effective compensation.[204] For instance, the ACIA holds that a host state "shall not expropriate or nationalize a covered investment either directly or through measures equivalent to expropriation or nationalization except for a public purpose, in a non-discriminatory manner, on payment of […] compensation and in accordance with due process of the law".[205] The annexes of the ACIA clarify that non-discriminatory regulatory measures

[203] DOLZER & SCHREUER, *supra* note 13,p.98.
[204] *Ibid.,* p.99.
[205] Article 14 (1) of ACIA.

designed to protect legitimate public welfare objectives, such as public health, safety, and the environment, do not constitute indirect expropriation.[206] All of Myanmar's BITs contain provisions dealing with the expropriation of foreign investment. However, except for the BITs with Singapore and Korea, none of Myanmar's BITs clarify what is meant by "direct expropriation" or "indirect expropriation". For greater clarity, Myanmar's BITs should contain consistent provisions in this matter.

In addition, the MIL and the Myanmar Investment Rule issued in 2017[207] provide legal guarantees that investors will have access to information and protection against direct and indirect expropriation and access to compensation. The regulations also guarantee access to due process if changes in regulations affect an investor's business. The government guarantees that it will not nationalize any investment carried out in accordance with the law. The Union must not nationalize economic enterprises.[208]

The government guarantees that it will not take any measures that expropriate or indirectly expropriate or are likely to result in the termination of investment, except under the following conditions: (a) the measure is necessary for the public interest; (b) the measure is applied in a non-discriminatory manner; (c) the measure is taken in accordance with applicable laws; and (d) there is prompt, fair and adequate payment of compensation.[209]

---

[206] Annex 2, para (4) of ACIA.
[207] Myanmar Investment Rules, Notification No. 35/2017, The Ministry of Planning and Finance, 30 March 2017.
[208] Article 36 (d) of the Constitution of the Union of Myanmar, 2008.
[209] Section 52 of MIL.

Under Indonesia's investment law, the government must not undertake any nationalization action or take over the ownership rights of any investor, except by law. In the event of nationalization, the government will grant compensation based on the market value.[210] However, the law does not contain the same exceptions as those provided under the MIL.

In the legal framework of investment protection, the investment legislation in both Indonesia and Myanmar guarantees that the property of investors will not be expropriated except under certain conditions. The provisions regarding expropriation and compensation under the MIL are more compatible with the provisions of Article 14 of the ACIA. Nonetheless, Myanmar still needs to explore the connection between the application of this guarantee and environmental issues in practice. The FET standard and protection against expropriation provisions are generally raised in ISDS cases. In a number of cases, tribunals have considered expropriation provisions, which are often invoked by investors, in relation to public purpose, non-discrimination, and compensation issues. In this respect, Myanmar needs to study international practice and the way tribunals have considered expropriation in connection with environmental protection concerns and compensation issues. Case analysis will be made in the next chapter (in Section 3.2).

3.1.2. Summary

[210] Article 7 of the Indonesian Investment Law.

This chapter highlights the fact that Myanmar has investment protection provisions in its national legislation and its IIAs. To promote responsible investment and to maintain an environmental management system, Myanmar should encourage the adoption of CSR standards, according to the OECD Guidelines for Multilateral Enterprises, in both its national laws and its investment treaties.

To strike a balance between investment protection and environmental protection, more precise and wider investment protection standards, such as FET and expropriation provisions, should be contained in the investment legislation. The new MIL and some Myanmar BITs still require their FET and expropriation provisions, which are the provisions relied on most often by foreign investors in ISDS cases, to be updated. Myanmar also needs to ensure greater consistency between its investment treaty provisions and its national investment legislation.

As the number of investment projects in extractive industries has been increasing in Myanmar, Myanmar should take into consideration the state's regulatory reforms for the protection of the environment. Some regulations enacted by the relevant ministries and local governments for the protection of the environment may be in conflict with the investment protection standards. Since Myanmar has been carrying out legal reforms of both its investment and its environmental legislation, future legal reforms should not conflict with investment protection standards. Moreover, Myanmar needs to ensure that environmental protection is not compromised in the application of the investment protection provisions.

Therefore, the next section will examine whether environmental protection measures brought in under national and international commitments restrict the application of the foreign investment protection standards. Some relevant international cases on environment-related investment will also be discussed in the next section.

3.2. Legal Framework for Environmental Protection in Myanmar

This section examines the current legal framework on environmental protection in Myanmar and how this is related to investment protection. The section also aims to highlight the barriers that exist when striking a balance between investment protection and the protection of the environment.

3.2.1. Environmental protection under national and international environmental legislation

In recent years, the over-exploitation of minerals and the over-utilization of soils and water in Myanmar has led to environmental degradation. Environmental concerns in Myanmar include loss of forest resources, water contamination, land degradation, climate change, biodiversity depletion, and waste management.[211] As a result of the release of waste chemicals in the extraction sector, soil, water, and air pollution occur. This severely

[211] D.A. Raitzer, J.N.G. Samson, and K.Y. Nam, *Achieving Environmental Sustainability in Myanmar*, ADB Economics Working Paper Series No. 467, December 2015, p. 4.

affects the environment, local people, and animals. In order to prevent this pollution, different nations and states have implemented various laws and policies for environmental protection. The environmental protection laws and policies implemented by governments often affect the protections given to environment-related investment activities.

3.2.1.1. Environmental protection under national environmental legislation

Myanmar's national legal reform process also involves updating and enforcing environmental policy and legislation. At the national level, Myanmar has been promulgating and amending its internal legislation and administrative measures in order to protect the environment and promote environmental management. Regarding the legal framework for the protection of the environment in Myanmar, the government must protect and conserve the natural environment according to Article 45 of the Constitution of the Republic of the Union of Myanmar, 2008. Moreover, under Article 390 (b), every citizen has a duty to assist the Union in carrying out the preservation and safeguarding of the cultural heritage, conserving the environment, and striving for the development of human resources. This signifies a greater commitment of Myanmar to responsible environmental management.

Again, under its economic policy, the Myanmar government has been making efforts to protect the environment and conserve its cultural heritage. The recent National Environmental Policy of Myanmar (2019) establishes national environmental policy principles for guiding environmental protection and sustainable development, and for bringing

environmental considerations into the mainstream in all policies, laws, regulations, plans, strategies, programmes, and projects in Myanmar.

Myanmar's main legislation related to the environment consists of the Environmental Conservation Law 2012 (ECL), the Environmental Conservation Rule 2014, the Environmental Impact Assessment Rules 2015, and Myanmar Agenda 21, 1997. In addition, Myanmar has enacted various laws related to the environment in different sectors, such as the mining sector,[212] the agriculture and irrigation sector, the culture sector,[213] the forestry sector,[214] the health sector, the hotel and tourism sector, the industrial sector,[215] the livestock and fisheries sector, and the national planning and economic development sector. The Penal Code also contains penalties for offences affecting public health and the environment.

In Myanmar, the MNREC is the main institution dealing with environmental protection matters. The ECL [216] states the duties and powers of the MNREC. The Environmental Conservation Department (ECD) guides investors who are implementing investment projects and have undertaken a full EIA. Investors have to comply with Myanmar's evolving environmental regulations.[217]

---

[212] The Law Amending the Myanmar Mines Law 2015 and the Myanmar Mines Law 1994.
[213] Protection and Preservation of Cultural Heritage Regions Law, which was enacted in 1998, revised in 2009 and supplemented in 2011 with regulations.
[214] Myanmar Forest Law 2018.
[215] Industrial Use Explosive Substances Law 2018.
[216] The Pyidaungsu Hluttaw Law No. 9/2012.
[217] In 2016, Myanmar passed new Environmental Quality Standards (EQS), Environmental Impact Assessment (EIA), and Social Impact Assessment (SIA) procedures.

In Myanmar, the exploitation of mineral and other natural resources is dominated by foreign investors. The extraction of oil, gas, and energy, the extraction of jade and other precious stones, and the exploration for minerals in the mining sector provide great opportunities for foreign investors with technical resources and know-how. The extractive industry is subject to environmental regulation by the state under the mining policy and relevant laws such as the Law Amending the Mines Law 2015 and the Myanmar Gemstone Law 2019. Myanmar needs to consider this policy space into consideration to harness investment to serve sustainable environmental approaches.

In Myanmar, the Union government has centralized the ownership and ultimate control of all natural resources and is responsible for enacting laws to supervise the extraction and utilization of these resources.[218] Regional or state governments have the authority to enact laws and regulations under section 118 and Schedule Two of the Constitution.[219] Again, self-administered divisions and self-administered zones have been allotted legislative power including the power over the preservation of the natural environment in accordance with the law promulgated by the Union.[220]

As discussed, in the *Churchill Mining* case the Indonesian local government revoked the investor's mining licence in order to protect the forest area within its territory,

[218] Article 37, 96, and Schedule One: Union Legislative List of the Constitution of the Union of Myanmar, 2008.
[219] For instance, medium and small-scale electric power production and distribution under Energy, Electricity, Mining, and Forestry Sector.
[220] Article 196 and Schedule Three of the Constitution of the Union of Myanmar, 2008.

following the recommendation of the Ministry of Forestry. In Myanmar, even the local government has not been given the authority to revoke mining licences, while relevant ministries have the authority to issue permits under the existing laws and regulations. For instance, the MNREC can grant a permit to carry out mining operations.[221] If the holder of the permit fails to comply with the rules and regulations, the person issuing the permit may cancel it.[222] Under Chapter XIII of the ECL, anyone who operates a business without the required permit under the existing laws is liable to criminal and civil proceedings.

As mentioned before, investors need an investment permit to work in the sectors specified under the MIL and the investment rules. The MIC has the authority to issue and revoke such permits. However, foreign investors in the extractive industries have to abide by the rules and regulations promulgated by the relevant ministries and the regional or state governments in which their investment projects have been established. In Myanmar, local people and civil societies often demand better regulation of the natural resources extraction sector in a region or state. With the purpose of protecting the environment and regional development, there may be opposition to investment projects from communities. Depending on the natural resources, cultural heritage, and other relevant matters of the regions or states, the rules and regulations vary. For example, safety standards under environmental regulations may not be harmonized across the country. This variable nature of environmental

[221] Section 7 of the Law Amending the Myanmar Mines Law 2015.
[222] Section 8 of the Myanmar Mines Law 1994.

protection measures may affect investment protection under the MIL and BITs. In Myanmar, investors have to consider such legal requirements for the protection of the environment. The varied laws and regulations of the host state may be one of the barriers to ensuring there is a balance between investment protection and environmental protection in Myanmar. By complying with the national and local environmental regulatory framework, investors can support Myanmar in promoting more responsible investment.

3.2.1.2. Environmental protection under international environmental legislation

MEAs are mechanisms for increasing foreign investment in areas of environmental need.[223] International environmental conventions attempt to encourage foreign investment as a way of reaching their environmental objectives. At the international level, Myanmar has signed, ratified, and acceded to various MEAs to control pollution and other environmental damage in collaboration with other countries. The National Environmental Policy also recognises and integrates Myanmar's commitments made in these MEAs. National environmental interests must be given thorough consideration before international or regional treaties are signed, and international investment treaties must recognise Myanmar's evolving environmental governance, honour previously ratified agreements, and utilize the most environmentally sustainable methods.[224]

[223] SANDS & PEEL, *supra* note 65, p.900.
[224] Principle 23 of National Environmental Policy 2019.

Myanmar is a signatory to, and an active participant in, the major MEAs such as the Convention on Biological Diversity, UNFCCC, the Convention for the Protection of the World Culture and Natural Heritage, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, and the Stockholm Convention on POPs. In compliance with the commitments given in the MEAs, national laws have been promulgated in Myanmar. The Protection of Biodiversity and Protected Area Law 2018, the Industrial Use Explosive Substances Law 2018, the Law Amending the Mines Law 2015, and The Environmental Conservation Law 2012 and Rules (2014) are some of the important laws for protecting the environment and developing environmental management.

As the sectors for environment-related business grow, there may be more MEAs in the future. Accordingly, national legislation must be consistent with such MEAs. New environmental regulatory measures may affect investors' legitimate expectations under the FET standard contained in the MIL and BITs. It is to be noted that if there is a conflict between the MIL and an international treaty or agreement adopted by the Union, the provisions contained in the latter will prevail.[225]

Foreign investors who intend to do business in Myanmar have to take into consideration the MEAs to which Myanmar is party and the relevant national environmental laws. States have to ensure that they provide relevant information on any measures or

[225] Section 91 of MIL.

decisions, including environment-related legislation, to investors.[226] States have to provide a transparent and predictable legal framework for investors. Amending national legislation so that it complies with international commitments may be a barrier to finding a balance between investment protection and the protection of the environment.

If an investment is adversely affected by environmental laws and regulations, this may result in a conflict with the BIT obligations. In the hope of attracting foreign investment, and in the search for economic development, states have been concluding IIAs and FTAs that include investment-related provisions. As stated in Chapter 2, at present there are eleven BITs in force in Myanmar. While there are benefits to signing such investment treaties, Myanmar needs to recognise that they could harm the state's responsibility to protect the environment. Benefiting from the provisions of these treaties, investors can challenge the environmental protection measures applicable in a state. Investors in the mining and extractive industries are the most frequent users of ISDS.[227] For example, several mining companies lodged ISDS claims against Indonesia when it enacted a new mining law. Consequently, Indonesia has been revising its investment treaty policies.

Currently, Myanmar depends on the exploitation and export of natural resources as a driver for economic development, and the Myanmar government influences the extractive industries. As Myanmar is a country in transition, outdated laws and policies have to be

[226] See section 48 (a) of MIL.
[227] For instance, *Glamis Gold v. US; Churchill Mining v. Indonesia.*

reformed. Myanmar has to make efforts in the future to restrict the negative environmental impacts of investment, and to re-regulate its natural resources more effectively. Such efforts could be challenged by foreign investors through ISDS systems. Therefore, Myanmar needs to take into consideration the provisions of its BITs and RITs, and the potential conflicts between investment protection and environmental protection measures.

Recent investment treaties have been providing general exception clauses to safeguard the government's space to introduce policies to protect the public interest, including environmental protection policies. Well-drafted exceptions clauses can help ensure that governments are not held liable for legitimate public policy measures that affect foreign investors. The exception clauses in investment treaties are derived from the General Agreement on Tariffs and Trade (GATT), Article XX, General Exceptions. According to Andrew Newcombe, it may be appropriate to apply GATT Article XX in the investment context since investment is likely to have a great impact on the environment.[228]

Article 17 of the ACIA creates three general exceptions for a range of measures, including measures necessary to protect public morals or to maintain public order, measures necessary to protect the life and health of humans, animals or plants, and measures relating to the conservation of exhaustible natural resources. For a host state to benefit from these exceptions, it would need to show that the measure in question does not amount to arbitrary

[228] Andrew Newcombe, *General Exceptions in International Investment Agreements, in* Marie-Claire Cordonier Segger, Markus W Gehring, Andrew Newcombe, eds., SUSTAINABLE DEVELOPMENT IN WORLD INVESTMENT LAW 355-370, p.361 (Wolters Kluwer, 2011).

or unjustifiable discrimination against investors of any other Member State.[229] According to the provision, the host state can adopt or enforce measures that are necessary to protect the life or health of humans, animals or plants.

In the case of Myanmar, the Japan–Myanmar BIT [230] and the Singapore–Myanmar BIT [231] contain general exception provisions that are broadly similar to the ACIA. Sections 89 (a-h) of the MIL implies that measures necessary to protect the life or health of humans, animals or plants, and measures relating to the preservation of natural resources, cannot be construed as unfair measures adopted by the government. The general exceptions clauses under the Singapore–Myanmar BIT contain similar provisions to the MIL.[232] However, early BITs agreed by Myanmar, such as the China–Myanmar BIT, the India–Myanmar BIT, and the Korea–Myanmar BIT, do not contain such provisions. Since China, India, and Korea are among the largest investors in Myanmar, Myanmar needs to consider the inclusion of general exceptions clauses in such BITs.

If drafted carefully, general exception provisions can address some of the concerns about the impact of investment treaties on legitimate laws and policies designed to protect the environment. Myanmar should include a general exception clause in every BIT. If this was done, the barriers to striking a balance between investment protection and environmental protection could be reduced. However, it is important to note that the existence

[229] Article 17 (1) of ACIA.
[230] Article 19 of Japan–Myanmar BIT.
[231] Article 29 of Singapore–Myanmar BIT.
[232] Article 29 (a) and (e) of Singapore–Myanmar BIT.

of exceptions clauses does not reduce the need to consider the other provisions of an investment treaty. Besides, there is no prevailing definition of what is meant by the general exceptions in the current BITs. If the investment protection standards are violated, it is not clear whether this can be justified by the exception clauses. For example, measures for the promotion of public health or the protection of the environment may conflict with the goal of investment protection under a BIT.

3.2.2. Summary

This section investigates issues concerning environmental protection provisions under the national and international legal frameworks in Myanmar. It considers some limitations that need to be taken into account when striking a balance between environmental protection and investment protection.

The section discusses the various laws and regulations of Myanmar, under national and international environmental legislation, that may create barriers to finding a balance between investment protection and environmental protection. Myanmar has to ensure consistency between the provisions of international treaties and national environmental regulations. By complying with the national and local environmental regulatory framework, investors can help Myanmar to promote more responsible investment.

The section also discusses how environment-related provisions under IIAs, such as general exceptions clauses, play a role in striking a balance between investment protection

and environmental protection. Myanmar needs to consider the inclusion of general exceptions clauses in all its BITs. If this was done, the barriers to striking a balance between investment protection and environmental protection could be reduced.

3.3. Case study on investment disputes involving environmental issues

The case study aims to assess how a conflict between investment protection and environmental protection is considered by an international investment arbitration tribunal. From this case study, Myanmar can learn about a conflict between an investor and a state relating to environmental concerns. Myanmar can use this case study when considering the legal requirements for its investment and environmental legal frameworks.

3.3.1. *Glamis Gold v. U.S.* [233]

This case was brought by a large Canadian-owned mining company, Glamis Gold, against the US government. Glamis owned mining rights in land in the south-eastern California Desert Conservation Area (para. 31). The area was designated as a site of special cultural concern. Californian legislation prohibited both state agencies and private parties operating on public property from using the land in a manner that would cause severe or irreparable damage to any Native American sanctified cemetery, religious or ceremonial site, or sacred shrine (para. 82). California had also brought in new regulatory measures, which

[233] *Glamis Gold v. U.S., supra* note 42.

included requirements for backfilling and grading for mining operations around Native American sacred sites (para. 166). The purpose of these measures was to protect the sacred sites from the adverse environmental effects of the proposed mining operations (para. 174).

When Glamis sought approval for a mining project to extract gold from an area close to the cultural site, the project was ultimately not approved. Glamis challenged the measures, contending that they were arbitrary and discriminatory, and were designed to block the project rather than genuinely to address environmental and cultural concerns associated with mining activities generally. Glamis claimed that the US had unfairly targeted the area in which Glamis was working, had refused Glamis a transparent and predictable legal framework within which to operate (paras. 568-574), and was arbitrary in the way that it protected cultural resources and prevented possible contributions to environmental degradation (paras. 687,789 and 803).

Glamis argued that the authorities had no discretion to refuse the plan: rather, a long-standing interpretation of the National Historic Preservation Act of 1966 (NHPA) had the effect of allowing the investor to be granted permission. In this regard, the Claimant alleged, among other things, a breach of the FET standard under NAFTA Article 1105 (paras. 633 and 636). Again, Glamis focused on the US government's cultural review of the investor's mining project. After the review, the project had been declared culturally significant, with the result that it was subject to more burdensome regulations. The Claimant alleged that there were various procedural deficiencies in the review process, and argued that it violated the

arbitrariness, transparency, and due process elements of the NAFTA Article 1105 standard (paras. 645-650).

The Respondent contended that the refusal of the plan was in accordance with the World Heritage Convention (UNESCO 1972 Convention) ratified by the United States and incorporated into the NHPA. It recognised that the destruction of any cultural site impoverishes "the heritage of all the nations of the world" (para. 84). The cultural review process had been carried out under Section 106 of the NHPA and it included a reasonable and appropriate survey given the vast area of land (para. 633).

The tribunal considered whether the environmental measures adopted amounted to unfair treatment or were tantamount to expropriation, in violation of Articles 1105 and 1110 of NAFTA. The tribunal considered the interpretation of the FET standard and the host state's defence that relied on national environmental law. NAFTA tribunals have accepted the Free Trade Commission's (FTC) interpretation,[234] which states that Article 1105 (1) reflects the customary international law minimum standard and does not require treatment in addition to or beyond that which is required by customary international law. According to Article 1105 (1) of NAFTA, which reflects the minimum standard of customary international law,

> *each party shall accord to investments of investors of another Party treatment in accordance with international law, including fair and equitable treatment and full protection and security.*

[234] FTC note of interpretation of 31 July 2001.

In this case, the tribunal confined its finding to Article 1105 of the NAFTA and remarked that its view did not extend to other treaty clauses referring to FET (paras. 606-610). Applying the standard of customary international law, the tribunal concluded that the obligation to afford FET would be violated only by an act that was:[235]

> *sufficiently egregious and shocking—a gross denial of justice, manifest arbitrariness, blatant unfairness, a complete lack of due process, evident discrimination, or a manifest lack of reasons—so as to fall below accepted international standards and constitute a breach of Article 1105. Such a breach may be exhibited by a "gross denial of justice or manifest arbitrariness falling below acceptable international standards;" or the creation by the State of objective expectations to induce investment and the subsequent repudiation of those expectations*.

The tribunal noted that the Respondent had submitted evidence that the decisions were reached based upon "Section 106-mandated cultural studies" (para. 781). The tribunal considered that this appeared to raise a presumption that the review did not breach Article 1105. The tribunal considered that the Claimant had not proved that these processes, and the decisions based upon them, were either arbitrary or manifestly lacking in reason (para. 781). The tribunal ruled that California's measures did not violate Article 1105. Concerning the cultural and environmental reasons behind the measures, the tribunal found that Glamis had not proved that the objective of the measures was not rationally related to the measures themselves (paras. 803 and 818). The case indicates that states have a responsibility to

---

[235] *Glamis Gold v. U.S., supra* note 42, para. 627.

ensure a transparent and predictable framework for investors' business planning and investment under the FET standard, but that the FET standard does not require anything beyond that which is required by the minimum standards of customary international law.

From this case, we can learn that the Myanmar government has a responsibility to ensure that there is a transparent and predictable framework for investors' business planning and investment in order to meet the FET standard. Even though the Myanmar government has the right to intervene in foreign investment transactions to protect the environment, the state's measures must not create a level of unpredictability in the regulatory regime. As discussed in Sections 2.1 and 2.2, the FET standard is required under Myanmar's legal framework for investment.[236] However, the FET wording under section 48 of the MIL and the early BITs does not mention the relationship with international law. The current Singapore–Myanmar BIT does include these provisions. Under Article 3 of the Singapore–Myanmar BIT, the minimum standards of customary international law for the treatment of aliens refer to all customary international law that protects the economic rights and interests of aliens.

By studying this case, it can be seen that the interpretation of the FET standard by a tribunal is an important factor when considering conflicts between investment protection and environmental protection. The tribunal looked at the FET standard by linking it to the customary international law minimum standard. We can conclude that the FET standard in the MIL and Myanmar's early BITs must be modified by connecting it to the international

[236] Section 48 of MIL.

customary law minimum standard. In this regard, some suggestions for the modification of the FET wording will be discussed in Chapter 4.

3.3.2. *Santa Elena v. Costa Rica* [237]

A Costa Rican corporation under the name *Compania Del Desarrollo De Santa Elena* was established in Costa Rica in 1970 to operate a tourist resort and residential community in Costa Rica's Guanacaste Province. The majority of the shareholders were US citizens (para.16). The area had a rich variety of plant and animal life, as well as a tropical dry forest that was home to a dazzling diversity of flora and fauna and located next to the Santa Rosa National Park (paras. 15-18).

On 5 May 1978, Costa Rica issued an expropriation decree with compensation for the territory of Santa Elena. The property was expropriated so that it could be added to the area of the Santa Rosa National Park to conserve flora and fauna, including jaguars, pumas, and sea turtles. The government considered that the project development proposed by the investors would be in conflict with the environmental protection of the area (paras. 17-18). Although it had no objection to the expropriation, Santa Elena disputed the price fixed by the state (para. 19). For nearly twenty years, the investor and the host state were involved in intensive legal proceedings before the courts of Costa Rica, interspersed with periods of inactivity (para. 20).

---

[237] *Santa Elena v. Costa Rica, supra* note 48.

On 15 May 1995, the investor (the Claimant) filed a request for arbitration. The main purpose of the arbitration was to determine how much the host state (the Respondent) had to pay to the Claimant in compensation for the expropriation of the property (para. 28). There was no dispute between parties that the expropriation was legal. The parties also agreed that the appropriate standard of compensation was the fair market value of the property (para 70). The dispute concerned the appropriate method for calculating the fair market value and the date on which this value was to be calculated. The Claimant wished to apply Costa Rican law, which would assess the value of the expropriated property at the time the compensation was paid.[238]

The Respondent argued that the expropriation decree was issued to meet legitimate environmental objectives. Regarding the method or date for calculating the amount of compensation, the Respondent favoured the application of international law, which would assess the value of the expropriated property at the time of expropriation.[239] The Respondent stated that if the level of compensation was too high, this would be an impediment for developing states including Costa Rica.[240] The Respondent stated that the Guanacaste Conservation Area had been listed as a World Heritage Site in 1999,[241] and

---

[238] TIENHAARA, *supra* note 46, p.164.
[239] *Ibid.*
[240] SANDS & PEEL, *supra* note 6565, p.914.
[241] Charles N. Brower & Eckhard R. Hellbeck, *The Implications of National and International Obligations for Foreign Investment Protection Standards, Including Valuation: A Report from the Front Lines*, *in* The International Bureau of The Permanent Court of Arbitration, *supra* note 106, 19-28, p.25.

alleged that the expropriation was carried out to fulfil its international commitments under different MEAs, including the World Heritage Convention.

To determine the amount of compensation to be paid to the investor for the expropriation of its property in Costa Rica, an ICSID tribunal applied the Costa Rica–US BIT. The tribunal noted that the parties were not in dispute that the purpose of the expropriation, the protection of the biodiversity of the state, was lawful (para. 71). Regarding the amount of compensation to be paid, the tribunal relied on the principle of full compensation at fair market value as the appropriate standard of compensation (para. 70). The tribunal accepted that the expropriation date was 5 May 1978. The tribunal considered that the Claimant was entitled to the full present value of the compensation that it should have received at the time of the expropriation (para. 101). The tribunal considered that international law would be applied in the absence of an explicit agreement on which law would govern the dispute. However, the tribunal did not accept that the standard of compensation could be affected by environmental concerns. In considering the duty of compensation, the tribunal said:[242]

> *While an expropriation or taking for environmental reasons may be classified as a taking for a public purpose, and thus may be legitimate, the fact that the Property was taken for this reason does not affect either the nature or the measure of the compensation to be paid for the taking. That is, the purpose of protecting the environment for which the Property was taken does not alter the legal character of the taking for which adequate compensation must be paid. The international source of the obligation to protect the environment makes no difference.* (…) Expropriatory

[242] *Santa Elena v. Costa Rica, supra* note 48, paras. 71-72.

> environmental measures—no matter how laudable and beneficial to society as a whole—are, in this respect, similar to any other expropriatory measures that a state may take to implement its policies: where the property is expropriated, even for environmental purposes, whether domestic or international, the state's obligation to pay compensation remains.

The case illustrates the level of compensation to be paid for the lawful expropriation of foreign investment property with the purpose of protecting the biodiversity of the state. Regarding the method or date of calculating the amount of compensation, the tribunal accepted that international law, which assesses the value of the expropriated property at the time of expropriation, should be applied. Also, the tribunal pointed out that the obligation to pay compensation remained since the environmental protection measures did not affect the nature of the expropriation.[243] When assessing the expropriation claim, the tribunal rejected any evidence submitted by the Respondent as to its international obligations to preserve the environment. The tribunal declined to consider the host state's obligations under international non-investment law.[244] The host state's obligations to protect public interest concerns in such areas as preserving the natural diversity of flora and fauna did not change its duty to pay compensation.[245]

---

[243] DOLZER & SCHREUER, *supra* note 13, p.122.
[244] *Santa Elena v.Costa Rica, supra* note 48, para 32; M. Hirsch, *Interactions Between Investment and Non-Investment Obligations*, *in* P. Muchlinski, F. Ortino and C. Schreuer, *supra* note 49, p.169.
[245] KULICK, *supra* note 128, p.236.

From this case study, it can be learned that the host state's obligation to pay compensation remained since the environmental protection measures did not affect the nature of the expropriation. In Myanmar, the amount of compensation for expropriation is based on a fair consideration of the public interest as well as the interests of the private investor.[246] As Myanmar has also been a member of the World Heritage Convention since 1994, environmental protection measures may be brought in under the relevant domestic laws (e.g., the Protection and Preservation of Cultural Heritage Regions Law 1998). In some way, these measures may interfere with foreign investments and the measures may be tantamount to expropriation. However, it should be noted that if the state expropriates the property of an investor with the purpose of protecting the environment, the obligation to pay compensation remains. Environmental protection measures may still give rise to compensation. Under the MIL, the amount of compensation is based on the fair market value at the time of the expropriation of the investment.[247] Myanmar's domestic investment law recognises the application of international law, which assesses the value of the expropriated property at the time of the expropriation. This is consistent with the ACIA and Myanmar's current BITs. However, the MIL does not mention the interest in the calculation of the amount of compensation. Under the ACIA, the compensation includes an appropriate interest in accordance with the laws and regulations of the member state making the expropriation.[248]

[246] Section 53 of MIL.
[247] Section 53 of MIL.
[248] Article 14 (3) of ACIA.

In this regard, the MIL and Myanmar's investment rules should have precise provisions relating to the determination of interest when calculating the amount of compensation.

3.3.3. Summary

From the case studies, we learn that the Myanmar government must ensure a transparent and predictable framework for investors' business planning and investment under the FET standard. However, the FET standard is no higher than the minimum standards of customary international law. The FET standard in the MIL and Myanmar's early BITs must be modified to connect them with the customary international law minimum standard.

Moreover, the case study highlights that environmental protection measures under national and international commitments do not affect the nature of expropriation. The obligation to pay compensation according to the expropriation provision remains. In calculating the amount of compensation for expropriation, the provisions under the MIL and Myanmar's investment rules must be revised to match the ACIA and Myanmar's current BITs.

3.4. Brief summary

FDI in Myanmar is, nowadays, directed towards industries for extracting natural resources, which severely affect the environment, local people, and animals. While attracting investment is important for the state's economic development, the protection of the

environment plays the same role. Therefore, Myanmar needs to take steps to balance investment protection and the protection of the environment in the country.

This concluding chapter summarizes the key challenges and makes some suggestions for how Myanmar can strike a balance between investment protection and the protection of the environment. As discussed in the previous chapters, Myanmar needs to reform its legal framework for both investment and environmental legislation.

Regarding investment legislation, investment protection standards will first be discussed. We have seen that the FET and expropriation provisions under the MIL and Myanmar's early BITs need to be modified to give clarification. As discussed in Chapters 2 and 3, the FET provisions under the MIL and the early BITs do not link up with international law. However, current BITs such as the Singapore–Myanmar BIT clarify the FET obligations by relating them to the minimum standard of treatment under customary international law. Likewise, the tribunal in *Glamis Gold v. US* considered that the minimum standard is connected with the FET standard. To reduce the likelihood of controversies between investment protection and environmental protection, the MIL and future BITs should provide as follows:

> *The Government guarantees to investors fair and equitable treatment under the customary international law minimum standard for the treatment of aliens. The obligation to provide "fair and equitable treatment" includes the obligation not to deny justice in criminal, civil, or administrative adjudicatory proceedings in accordance with the principle of due process embodied in the principal legal systems of the world. For greater certainty, the obligation to provide "fair and*

equitable treatment" does not require treatment in addition to or beyond that which is required by this standard and does not create additional substantive rights. The customary international law minimum standard for the treatment of aliens refers to all customary international law principles that protect the economic rights and interests of aliens.

Concerning expropriation, the MIL provides legal guarantees and protection against direct or indirect expropriation except under four stated conditions. As discussed in Section 2.2.2, the provisions regarding direct or indirect expropriation under the MIL are compatible with the ACIA. However, Myanmar's early BITs do not clarify these expressions. For more clarification, Myanmar's BITs should have consistent provisions in this matter. For instance, Annex II of the Singapore–Myanmar BIT clarifies the term expropriation for two situations. The first situation is "direct expropriation", which means *"where an investment is nationalized or otherwise directly expropriated through formal transfer of title or outright seizure".* The second situation is "indirect expropriation", which means *"where an action or series of actions by a Party has an effect equivalent to direct expropriation without formal transfer of title or outright seizure".* Myanmar's early BITs should follow the explanation in the Singapore–Myanmar BIT.

Also, as discussed in Section 3.3.2, compensation for expropriation is a critical issue in international investment cases. However, the MIL does not specifically mention the interest in the calculation of the amount of compensation. Regarding compensation, Article 6 (2) of the Singapore–Myanmar BIT provides: *"The compensation shall include interest at a*

commercially reasonable rate for that currency, accrued from the date of expropriation until the date of payment". Myanmar should include similar provisions under the section entitled "Expropriation" in the MIL, to make it consistent with the ACIA and current BITs.

It appears that the MIL and some BITs contain obligations on investors to promote responsible investment and to maintain an environmental management system in Myanmar. However, Myanmar is still required to encourage the adoption of CSR standards according to the OECD Guidelines for Multilateral Enterprises in both the MIL and its BITs. For instance, Indonesia's Investment Law provides: *"each investor is obliged to implement the principles of good corporate governance, and to meet corporate social obligations".* Again, Norway's Model BIT requires the parties *"to agree to encourage investors to conduct their investment activities in compliance with the OECD Guidelines for Multilateral Enterprises and to participate in the United Nations Global Compact".* To strike a balance between investment protection and environmental protection, the MIL and Myanmar's BITs should contain similar CSR provisions.

Concerning environmental legislation, Section 3.2.1.2 discusses the significance of general exception provisions. These provisions can address some of the concerns about the impact of investment treaties on laws and policies designed to protect the environment. The chapter shows that the MIL and some current BITs contain general exception provisions that are broadly similar to the ACIA. However, Myanmar needs to consider the inclusion of more precise general exception provisions in the MIL and all BITs. The chapter explains that the

ACIA and the Singapore–Myanmar BIT contain a separate exception clause related to the protection of national treasures of artistic, historic, or archaeological value. Also, the conservation of exhaustible natural resources is provided as a separate exception. Since Myanmar is a country that is rich in natural resources and cultural heritage, the MIL and all BITs should contain similar separate exception provisions under the title of general exceptions.

Regarding environmental legislation, varying national legislation in order to comply with international commitments may be a barrier to striking a balance between investment protection and environmental protection. New environmental regulatory measures to ensure compliance with future MEAs may affect investors' legitimate expectations under the FET standard contained in the MIL and the BITs. Myanmar needs to be much more careful about its commitments under MEAs and IIAs. Myanmar also needs to take into consideration the varying nature of the environmental laws and regulations that are enacted by relevant ministries and local governments. Myanmar is obliged to adopt environmental protection measures that are as consistent as possible with investment protection.

This section notes that Myanmar's current BITs are very inconsistent with each other and that Myanmar has been a rule-taker in investment treaty negotiations. Myanmar needs to ensure greater consistency between investment treaty provisions and its national investment legislation. Myanmar needs to be able to play the role of rule-maker in concluding future investment treaties. Furthermore, as mentioned above, some of Myanmar's current

BITs overlap with ASEAN IIAs that Myanmar has signed. For instance, Myanmar has concluded BITs with ASEAN member countries such as Indonesia, the Philippines, Singapore, Thailand, and Vietnam that are also members of the ACIA. Myanmar thus needs to consider the termination of overlapping BITs, to reduce its risk of being subjected to investment claims. Myanmar has to ensure that it has a transparent and predictable legal framework for investors in both investment legislation and environmental legislation. The harmonizing of economic policy and environmental governance in Myanmar will strike a balance between the protection of foreign investment and the protection of the environment in Myanmar.

Chapter IV. Conclusion

The research has examined the relationship between foreign investment protection and environmental protection since these two components are at the core of every state's economic and sustainable development. Environmental regulations enacted by the host state and the protection granted to foreign investment may clash under certain circumstances. In these cases, it is necessary to balance the rights of the investor who deems to be negatively affected by a measure of the host state with the rights of the community to a safe environment.

The obligations of the host state under the investment agreements sometimes conflict with its obligations under international environmental law. Even though early investment agreements may be silent on environmental issues, some recent IIAs describe some provisions for environmental protection purposes. It is desirable to consider the investment protection provisions under IIAs and environmental standards under MEAs in a harmonious way in order to reduce the conflicts between two bodies of law. The need to strike an appropriate balance between the promotion and protection of foreign investment and the protection of the environment to be a challenge for the states. Therefore, the research argues to find a proper balance between investment protection under international investment law and environmental protection under international environmental law. For that purpose, the research focuses on, at first, conflicts between core investment protection

standards under IIAs and environmental standards under MEAs. Secondly, international practices in this context have been examined to make some suggestions to Myanmar.

In this respect, the first section of Chapter II has analysed core investment protection standards under IIAs such as NT, MFN, FET, and expropriation in connection with environmental regulations. Under the NT and MFN standard, the material components such as “in like circumstances” and “relevant comparators” have been examined in relation to environmental issues. Regarding the FET standard, the section has examined some relevant investment disputes. It is also recognised that environmental concerns can lead to a legitimate alteration of the legal framework unless the alteration is arbitrary or discrimination. In the context of expropriation, the case study has analysed the component of “substantial deprivation”. It is learned that environmental protection measures did not affect the nature of the expropriation. The host state’s obligations to pay compensation still remained for direct expropriation. It is also realised that an environmental measure that constitutes indirect expropriation will not be relevant if the investor has not been substantially deprived of its investment. This section concluded that international investment protection standards operate in practice do not constraint the enforcement of environmental protection regulations by the state. From the studies of international practices in the settlement of conflicts between investment protection standards and environmental regulations, Myanmar can learn lessons in preparation to reach a balance between investment protection and environmental

protection. The research found that investment protection provisions in Myanmar investment legislation need to be modified. Especially, the FET standard and protection against expropriation provisions should be modified not only in the MIL but also in recent BITs.

Then, this thesis has also researched the application of environmental principles that assist the integration of international investment law with international environmental law. Chapter II analysed the applicability of precautionary principle in international investment arbitration. The chapter has explored the substantive and procedural aspects of components of precautionary principle. The violation of the concepts of precautionary principle would give rise to a separate claim for breach of investment protection standards. The precautionary principle becomes a conceptual basis for the adopted measure. The chapter has assumed that even precautionary measures are reflected under the investment protection standards, investors, host states and international investment tribunals could show greater deference in this context. The chapter has found that substantive and procedural aspects of the precautionary principle play an important role in reaching a balance between investment protection and environmental protection. The application of precautionary principle in investment arbitration can be used as a justification to strike a balance between investment protection and environmental protection.

Since Myanmar is rich in natural resources, the environmental risk may occur in the industry sectors as well as in socio-economic sectors. Myanmar's investment legislation

should refer to environmental principles for environmental protection. Implementing measures under precautionary principle has to be invoked in investment legislation. In applying precautionary principle under MEAs, new environmental regulatory measures of the state may affect investment protection standards under IIAs. For instance, Myanmar has acceded to various MEAs including the 1992 Biodiversity Convention to control the environmental damages. The Myanmar National Environmental Policy 2019 integrates Myanmar's commitments to MEAs. Under Principle 23 of the Policy, national environmental interests will be given thorough consideration before signing international and regional treaties. International investment treaties must recognise the state's evolving environmental governance and honour previously ratified agreements. It is necessary to implement the precautionary measures in Myanmar investment legislation in compliance with international commitments to strike a proper balance between investment protection and environmental protection.

The third section of Chapter II discussed the negative impact of some investment related projects in different sectors. The investment tribunals demonstrated awareness regarding the right of respondent states to adopt regulatory measures that seek to limit the negative impact of foreign investors' activities. This section has pointed out that current investment protection standards are not adequately taken into consideration of the negative impact of the activities in different environment-related investment sectors. The research

pointed out the promotion of responsible investment to maintain the environmental management system in Myanmar. As discussed in Section 3.4, Myanmar is required to encourage the adoption of CSR standards according to OECD Guidelines for Multinational Enterprises in investment legislation. The inclusion of CSR standards in MIL and current Myanmar BITs could strike a balance between investment protection and environmental protection in Myanmar.

Chapter III has analysed current Myanmar investment legislation and investment protection standards under current BITs. This chapter has conducted a comparative analysis between Myanmar and Indonesia's investment legislation. Indonesia's experience in investment tribunals is supportive for Myanmar to prevent potential ISDS. Based on Indonesia's case analysis and discussions in the previous chapter, Section 3.4 has made detailed suggestions of modification of core investment protection standards under MIL and current BITs. I believe that the modifications will be supportive to resolve the conflicting interests and reach a balance between foreign investment protection and environmental protection in Myanmar. Furthermore, the thesis has underlined that the inclusion of more precise general exception clauses in investment legislation will promote responsible investment in Myanmar. On the other hand, it is recognised that varying environmental legislation at the national level may be a barrier to strike a balance. Myanmar is obliged to implement environmental protection measures that are as coherent as possible with

investment protection measures. In conclusion, I believe that the above-mentioned reform measures may strike a balance between investment protection and environmental protection in Myanmar.

LIST OF REFERENCES

[Articles, Books]

Adolf Huala, *Indonesia, Foreign Investment and Investment Arbitration, in* Esplugues Carlos, eds., FOREIGN INVESTMENT AND INVESTMENT ARBITRATION IN ASIA 101-123, (Intersentia, 2019).

AMADO JOSE, KERN JACKSON AND RODRIGUEZ MARTIN, ARBITRATING THE CONDUCT OF INTERNATIONAL INVESTORS (CUP, 2018).

Baughen Simon, *Expropriation and Environmental Regulation: The Lessons and NAFTA Chapter Eleven,* 18 JOURNAL OF ENVIRONMENTAL LAW 207-228 (2006).

Bekhechi Mohammed, *International Investment and Environmental Protection: Notes on the Environmental Conditions of Investment in the Oil and Mining Sectors, in* THE INTERNATIONAL BUREAU OF THE PERMANENT COURT OF ARBITRATION, INTERNATIONAL INVESTMENT AND PROTECTION OF THE ENVIRONMENT: THE ROLE OF DISPUTE RESOLUTION MECHANISM 73-90 (Kluwer Law International, 2001).

BENEDETTO SAVERIO, INTERNATIONAL INVESTMENT LAW AND THE ENVIRONMENT (Edward Elgar, 2013).

Beyerlin Ulrich, *Different Types of Norms in International Environmental Law: Policies, Principles, and Rules, in* Bodansky Daniel, Brunnee Jutta and Hey Ellen, eds., THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 425-450 (OUP, 2007).

BIRNIE PATRICIA & REDGWELL CATHERINE, INTERNATIONAL LAW AND THE ENVIRONMENT (OUP, 2009).

Bonnitcha Jonathan, *International Investment Arbitration in Myanmar: Bounded Rationality, but Not as We Know It*, *in* Chaisse Julien & Nottage Luke, eds., INTERNATIONAL INVESTMENT TREATIES AND ARBITRATION ACROSS ASIA 335-360 (Brill Nijhoff 2018).

Brower Charles & Hellbeck Eckhard, *The Implications of National and International Obligations for Foreign Investment Protection Standards, Including Valuation: A Report for the Front Lines, in* The International Bureau of The International Bureau of the Permanent Court of Arbitration, INTERNATIONAL INVESTMENT AND PROTECTION OF THE ENVIRONMENT: THE ROLE OF DISPUTE RESOLUTION MECHANISM 19-28 (Kluwer Law International, 2001).

DiMascio Nicholas and Pauwelyn Joost, *Nondiscrimination in Trade and Investment Treaties: Worlds Apart or Two Sides of the Same Coin?* 102 AJIL (2008).

DOLZER RUDOLF & SCHREUER CHRISTOPH, PRINCIPLES OF INTERNATIONAL INVESTMENT LAW (OUP 2nd ed., 2012).

DUPUY PIERRE-MARIE & VIÑUALES JORGE, INTERNATIONAL ENVIRONMENTAL LAW (CUP 2nd ed., 2018).

Ferracane Martina, *Investor-State Dispute Settlement (ISDS) Cases in the Asia-Pacific Region – The Record*, *in* Chaisse Julien, Ishikawa Tomoko, Jusoh Sufian, eds., ASIA'S CHANGING INTERNATIONAL INVESTMENT REGIME: SUSTAINABILITY, REGIONALIZATION, AND ARBITRATION 229-242 (Springer, 2017).

FOLSOM RALPH, FOREIGN INVESTMENT LAW INCLUDING INVESTOR-STATE ARBITRATIONS IN A NUTSHELL (West Academic Publishing 2nd ed., 2019).

Giest Alison, *Interpreting Public Interest Provisions in International Investment Treaties,* 18 CHICAGO JOURNAL OF INTERNATIONAL LAW 321-352 (2017).

Hirsch Moshe, *Interactions Between Investment and Non-Investment Obligations, in* Muchlinski Peter, Ortino Federico and Schreuer Christoph, THE OXFORD HANDBOOK OF INTERNATIONAL INVESTMENT LAW 154-181 (OUP, 2008).

Jusoh Sufian, *Myanmar's Investor-State Dispute Settlement Experience and Investor Grievance Mechanism, in* Esplugues Carlos, eds., FOREIGN INVESTMENT AND INVESTMENT ARBITRATION IN ASIA 205-226 (Intersentia, 2019).

Klager Roland, Fair and Equitable Treatment and Sustainable Development, *in* Segger Marie-Claire, Gehring Markus, Newcombe Andrew, eds., SUSTAINABLE DEVELOPMENT IN WORLD INVESTMENT LAW 241-262 (Wolters Kluwer, 2011).

KULICK ANDREAS, GLOBAL PUBLIC INTEREST IN INTERNATIONAL INVESTMENT LAW (CUP, 2012).

Lambooy Tineke, Prihandono Iman, and Barizah Nural, *Foreign Direct Investment in the Mining Industry in Indonesia: Disputes Concerning Environmental Degradation and Pollution, in* Levashova Yulia, Lambooy Tineke, Dekker Ige, eds., BRIDGING THE GAP BETWEEN INTERNATIONAL INVESTMENT LAW AND THE ENVIRONMENT 383-440 (Eleven International Publishing, 2016).

MALINTOPPI LORETTA & TAN CHARIS, INVESTMENT PROTECTION IN SOUTHEAST ASIA: A COUNTRY-BY-COUNTRY GUIDE ON ARBITRATION LAWS AND BILATERAL INVESTMENT TREATIES (Brill Nijoff, 2017).

MARISI FLAVIA, ENVIRONMENTAL INTERESTS IN INVESTMENT ARBITRATION: CHALLENGES AND DIRECTIONS (Wolters Kluwer, 2020).

MCLACHLAN CAMPBELL, SHORE LAURENCE, WEINIGER MATTHEW, INTERNATIONAL INVESTMENT ARBITRATION: SUBSTANTIVE PRINCIPLES (OUP 2nd ed., 2017).

MILES KATE, THE ORIGINS OF INTERNATIONAL INVESTMENT LAW: EMPIRE, ENVIRONMENT AND THE SAFEGUARDING OF CAPITAL (CUP, 2013).

NANTEUIL ARNAUD, INTERNATIONAL INVESTMENT LAW: PRINCIPLES OF INTERNATIONAL LAW (EDWARD ELGAR, 2020).

Newcombe Andrew, General Exceptions in International Investment Agreements, in Marie-Claire Cordonier Segger, Markus W Gehring, Andrew Newcombe, eds., SUSTAINABLE DEVELOPMENT IN WORLD INVESTMENT LAW 355-370 (Wolters Kluwer, 2011).

Nottage Luke, Chaisse Julien and Thanitcul Sakda, *International Investment Treaties and Arbitration Across Asia: A Bird's Eye View*, *in* Chaisse Julien & Nottage Luke, eds., INTERNATIONAL INVESTMENT TREATIES AND ARBITRATION ACROSS ASIA 3-56, (Brill Nijhoff, 2018).

Peel Jacqueline, *The Use of Science in Environment-Related Investor-State Arbitration in* Miles Kate, eds., RESEARCH HANDBOOK ON ENVIRONMENT AND INVESTMENT LAW 244-263 (Edward Elgar, 2019).

SADELEER NICOLAS, ENVIRONMENTAL PRINCIPLES: FROM POLITICAL SLOGANS TO LEGAL RULES (OUP, 2002).

SALACUSE JESWALD, THE LAW OF INVESTMENT TREATIES (OUP, 2nd ed., 2015).

SANDS PHILIPPE & PEEL JACQUELINE, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW (CUP, 4th ed., 2018).

TIENHAARA KYLA, THE EXPROPRIATION OF ENVIRONMENTAL GOVERNANCE: PROTECTING FOREIGN INVESTORS AT THE EXPENSE OF PUBLIC POLICY (CUP, 2009).

Telesetsky Anastasia, *International Investment Law and Biodiversity, in* Miles Kate, RESEARCH HANDBOOK ON ENVIRONMENT AND INVESTMENT LAW 131-149 (Edward Elgar, 2019).

Yannaca-Small Katia, *Fair and Equitable Treatment Standard: Recent Developments, in* Reinisch August, eds., STANDARDS OF INVESTMENT PROTECTION 111-130 (OUP, 2008).

Viñuales Jorge, *Foreign Investment and the Environment in International Law: An Ambiguous Relationship,* 80 BRITISH YEARBOOK OF INTERNATIONAL LAW 244-332 (2009).

ZANDER JOAKIM, THE APPLICATION OF THE PRECAUTIONARY PRINCIPLE IN PRACTICE: COMPARATIVE DIMENSIONS 1 (CUP, 2010).

[Reports, Documents]

Communication from the Commission on the Precautionary Principle, Commission of the European Communities, COM (2000) 1 final, Introduction.

Raitzer David, Samson Jindra, and Nam Kee Yung, *Achieving Environmental Sustainability in Myanmar*, ADB Economics Working Paper Series No. 467, December 2015.

General Assembly Resolution, *Resolution on Permanent Sovereignty over Natural Resources,* Resolution 1803 (XVII), UN Doc. A/5217 (1962), 14 December 1962.

National Treatment, UNCTAD Series on Issues in International Investment Agreements (New York and Geneva: United Nations), United Nations publication, Sales No. E.99.II.D.16.

OECD Guidelines for Multilateral Enterprises 43-44 (OECD Publishing, 2011).

OECD, *"Indirect Expropriation" and the "Right to Regulate" in International Investment Law,* OECD Working Papers on International Investment (2004/4).

OECD Investment Policy Review: Myanmar, OECD, 2014.

UNCTAD, Bilateral Investment Treaties, 1996-2006: Trends in Investment Rulemaking 33 (2006).

[Legal documents and IIAs]

(Myanmar)

Industrial Use Explosive Substances Law 2018

Mineral and Coal Mining Law 2009

Myanmar Arbitration Law 2016

Myanmar Investment Law 2016

Myanmar Investment Rules 2017

Myanmar-Japan BIT 2013

Myanmar Mines Law 1994

Myanmar-Singapore BIT 2019

Notification No.643/2018 of the Supreme Court of the Union of Myanmar

Protection and Preservation of Cultural Heritage Regions Law 1998

The Constitution of the Union of Myanmar, 2008

The Environmental Conservation Law 2012 and Rules (2014)

The Foreign Investment Law 2012

The Forest Law 2018

The Industrial Use Explosive Substances Law 2018

The Law Amending the Myanmar Mines Law 2015
The Myanmar Citizens Investment Law 2013
The Protection of Biodiversity and Protected Area Law 2018

(International)

ASEAN Comprehensive Investment Agreement (ACIA)
ASEAN-China Agreement on Investment
ASEAN-India Agreement on Investment
ASEAN-Korea Agreement on Investment
ASEAN-Australia-New Zealand Free Trade Agreement
ASEAN-Hong Kong China SAR Investment Agreement
Basel Convention on The Control of Transboundary Movements of Hazardous Wastes and their Disposal in 1989 (Basel Convention)
Bergen Ministerial Declaration on Sustainable Development in the ECE Region
Dominican Republic-Central America FTA (DR-CAFTA)
Energy Charter Treaty (ECT)
India Model BIT 2003
Indonesian Law No. 25 of 2007 on Capital Investment
North American Free Trade Agreement (NAFTA)
Norway-Lithuania BIT 1992
Protocol on Biosafety (Cartagena Protocol on Biosafety) (2000)
Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants (1998) (Aarhus Protocol on POPs)
The 1992 Rio Declaration on Environment and Development
US Model BITs 2004 and 2012
United Nations Convention on Biological Diversity 1992.
United Nations Educational, Scientific, and Cultural Organisation (UNESCO Convention)
United Nations Framework Convention on Climate Change (UNFCCC) 1992
United States-Chile Free Trade Agreement 2003,
World Charter of Nature, GA Res. 37/7, 28 October 1982.
Wingspread Statement on the Precautionary Principle, 1998.

LIST OF CASES

ADC Affiliate Limited and ADC & ADMC Management Limited v. Republic of Hungary, ICSID Case No. ARB/03/16, Award (2 October 2006).

Adel A Hamadi Al Tamimi v. Sultanate of Oman, ICSID Case No. ARB/11/33, Award (3 November 2015).

Chemtura Corporation v. Government of Canada, UNCITRAL, Award (2 August 2010).

Churchill Mining Plc. And Planet Mining Pty Ltd., v. Republic of Indonesia, ICSID Case No. ARB/12/40 and 12/14, Award (6 December 2016).

Compania Del Desarrollo De Santa Elena, S.A. v. The Republic of Costa Rica, ICSID Case No. ARB/96/1, Award (17 February 2000).

David R. Aven, Samuel D. Aven, Carolyn J. Park, Eric A. Park, Jeffrey S. Shioleno, David A. Janney And Roger Raguso v. The Republic of Costa Rica, Case No. UNCT/15/3, Award (18 September 2018).

David R. Aven, Samuel D. Aven, Carolyn J. Park, Eric A. Park, Jeffrey S. Shioleno, David A. Janney And Roger Raguso v. The Republic of Costa Rica, Counter Memorial of the Respondent, (8 April 2016).

Glamis Gold, Ltd v. the United States of America, UNCITRAL, Award (8 June 2009).

Metalclad Corporation v. United Mexican States, Award (30 August 2000).

Methanex Corp v. The United States, UNCITRAL, Final Award (5 August 2005).

Parkerings-Compagniet AS v. Republic of Lithuania, ICSID Case No. ARB/05/8, Award (11 September 2007).

Pope & Talbot Inc. v. Canada, UNCITRAL (NAFTA), Award (7 August 2000).

Peter A. Allard v. The Government of Barbados, PCA Case No. 2012-06, UNCITRAL, Award (27 June 2016).

Peter A. Allard v. Government of Barbados, PCA Case No. 2012-06, UNCITRAL, Notice of Dispute (8 September 2009).

S.D. Myers Inc. v. Canada, NAFTA Arbitration, UNCITRAL, Partial Award (13 November 2000).

Southern Pacific Properties (Middle East) Limited (SPP) v. Arab Republic of Egypt, ICSID Case NO. ARB/843/3, Award (20 May 1992).

Técnicas Medioambientales Tecmed, S.A. v. The United Mexican States, ICSID Case No. ARB (AF)/00/2, Award (29 May 2003).

William Ralph Clayton, William Richard Clayton, Douglas Clayton, Daniel Clayton and Bilcon v. The Government of Canada, UNCITRAL, PCA Case No. 2009-04, Award on Jurisdiction and Liability (17 March 2015).

Yaung Chi Oo Trading Pte Ltd., v. Government of the Union of Myanmar, ASEAN I.D. Case NO. ARB/01/1, Award (31 March 2003).