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Chief Justice's Speech For The Opening Of The Legal Year 2017

by

Tun Arifin Zakaria[*]

On behalf of the Judiciary, it is both a pleasure and a privilege to welcome all of you this morning to our ceremonial Opening of the Legal Year 2017.

Introduction

This year, the opening of the legal year is of exceptional significance to me, as it marks the culmination of my tenure as the Chief Justice of the Judiciary. In as much as it marks the end of a chapter in the judicial history of Malaysia, it signals the beginning of a new era in our continuing judicial narrative. Notwithstanding the changes that will inevitably ensue, and the legal challenges that must follow, the other arms of government, the legal profession, and indeed the citizens of the nation may rest assured that the Judiciary will remain a bulwark of strength, continuing to protect, preserve and strengthen the Rule of Law, ensuring that it endures through time.

In line with this year's theme, my speech this morning will focus significantly on the environmental rule of law.

The Rule Of Law

In my speech last year I alluded to the fact that the rule of law defies precise definition. It is a concept, which has been described as one "that resonates across borders and boundaries

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* This article is adapted from the speech of the Chief Justice at the Ceremony of the Opening of the Legal Year 2017 on 13 January 2017.

while reflecting a diverse set of perspectives rooted in societies' culture, history, politics, institutions and conceptions of justice" [1].

At its core however, it may be said that the rule of law is a means of ordering society. It includes state-citizen relationships, systems of rules and regulations and the norms that infuse them, as well as the means of adjudicating and enforcing such rules. The substance of values, rules and their application vary deeply across cultures and contexts[2]. The inexplicable singularity of the rule of law, certainly from my point of view, is its ability to encompass and embrace this diversity of culture, history, politics and conceptions of justice such that it is, in reality, a multi-dimensional concept, that is inextricably linked to the values, norms and politics espoused by a nation state or region. Its importance cannot be overemphasized, given the powerful role it plays in the development and sustainability of a nation-state[3].

One of the significant, if not the central, features of the rule of law is its relationship with justice. Often, the generally accepted definition finds its roots in legal philosophy from the global north. We have inherited the common law system from England, and to that extent the norms of the rule of law systems we inherited include the way in which our political system is ordered, as well as a series of institutions that maintain the "rule

1. See 'Background Paper: Overview on the Rule of Law and Sustainable Development for the Global Dialogue on Rule of Law and the Post-2015 Development Agenda' by Louis-Alexandre Berg and Deval Desai of Georgetown and Harvard Law School respectively.
2. See *ibid* at page 5.
3. See above at pages 6 and 7.

of law"[4]. The Judiciary's pivotal role as one of the pillars that upholds the rule of law is undeniable. In Malaysia therefore, the rule of law reflects not only the basic tenets of the English common law, but incorporates our unique cultures and traditions, which subsisted well before colonial rule.

Judicial independence, both institutional and personal, comprises key elements of the rule of law in relation to justice. In the performance of our role, the courts strive with the other key stakeholders, namely the legal profession and the judicial and legal service, to ensure that justice is administered fairly and plainly, so as to facilitate the welfare and well-being of the population. The law and the administration of the law are not designed to obstruct or obliterate the activities and lives of the general populace. On the contrary, our objective is to improve the lives of our citizens, so as to enable them to live with dignity, within our prevailing laws. It is our duty to ensure unhindered access to justice for all citizens, and to enforce the laws of the land equitably and transparently. Inherent in these functions is our paramount duty to be independent, impartial and incorruptible.

Correlation Between The Rule Of Law, The Environment And Sustainable Development

Permit me to touch briefly on the correlation between the rule of law, the environment and sustainable development.

4. See *ibid* at page 6 taken from Rosseau, J-J. (ed Gourevitch, V) (1997), The Social Contract and other later political writings. Cambridge University Press; Posner, E (2002), Law and Social Norms, Cambridge, MA: Harvard University Press; Posner R (1983), The Economics of Justice. Cambridge, MA: Harvard University Press; Sen, A 2009 The Idea of Justice. Cambridge, MA: Harvard University Press; Sandel, M (1998), Liberalism and the Limits of Justice. Cambridge, Cambridge University Press; Dworkin, R (1986), Law's Empire. Cambridge, MA: Harvard University Press; Nozick, R (1974), Anarchy, State and Utopia. New York: Basic Books.

As I stated earlier, the rule of law encompasses a myriad of elements. Yet it remains indefinable. This is because the list of elements is, in a sense, infinite. The rule of law remains a multi-faceted concept. Ultimately however the rule of law is not a goal in itself. Instead, it is essential in the pursuit of the development of a nation state, not only politically or economically, but for the welfare and well-being of the populace.

The right to development has long been recognised. Article 1 of The Declaration on the Right to Development, 1986 [5] asserts that "the right to development is an inalienable human right". This principle has been accorded recognition internationally [6]. However it is equally recognised that the protection of the environment is similarly a part of the human rights doctrine. The balance between these seemingly opposing rights, is simply this, namely that while all people have the right to pursue development and enjoy its benefits, that right is neither absolute nor unfettered. It is necessary to ensure that they do not cause significant damage to the environment. In short, development should be in harmony with the environment, and cannot be pursued so as to substantially damage the environment. This principle, also recognised as a principle of international law is embodied in the concept of sustainable development [7].

Protection And Conservation Of The Environment

The concept, indeed the principle, of the maintenance and conservation of the environment is not new. It traces its roots back to ancient wisdom, religions and numerous cultures.

5. The Declaration on the Right to Development is a UN Document. It was adopted by the General Assembly by resolution 41/128 of 4 December 1986.
6. See Gabcikovo-Nagymaros Project, *Hungary v. Slovakia* [1997] ICJ Rep 7 at paragraphs 23-36 of the separate concurring opinion of the Vice-President Weeramantry (often referred to as the "*Hungarian Dams*" case).
7. *Ibid* at paragraph 23 onwards.

The Qur'anic verse in Surah Al-Baqarah verse 164 extols as follows:

> In the creation of the heavens and earth; in the alternation of the night and the day; in the ships that sail the seas with goods for people; in the water which God sends down from the sky to give life to the earth when it has been barren, scattering all kinds of creatures over it; in the changing of the winds and the clouds that run their appointed courses between the sky and earth:- there are signs in all these for those who use their minds ... [8].

A saying of the Holy Prophet (PBUH) is as follows:

> The world is beautiful and verdant, and verily God, be He exalted, has made you His stewards in it, and He sees how you acquit yourselves. (narrated by Muslim)

Mahatma Gandhi said:

> The earth, the air, the land and the water are not an inheritance from our forefathers but on loan from our children. So we have to hand over to them at least as it was handed over to us.

The Taoist doctrine says:

> If the pursuit of development runs counter to the harmony and balance of nature, even if it is of great immediate interest and profit, people should restrain themselves from it. Insatiable human desire will lead to the over-exploitation of natural resources. To be too successful is to be on the path to defeat.

And moving on to more modern times, Al Gore when delivering his Nobel Lecture in 2007 stated:

> The future is knocking at our door right now. Make no mistake; the next generation will ask us one of two questions. Either they will ask: 'What were you thinking; why didn't you act?' Or they will ask instead: 'How did you find the moral courage to rise and successfully resolve a crisis that so many said was impossible to solve?'.

8. See M.A.S. Abdeel Haleem, *The Qur'an A New Translation* (Oxford World's Classics) at page 18 verse 164.

That choice is one that lies within our control, both individually and as collective nation states.

Sustainable Development

The concept of sustainable development may be traced back to international forums dating from the 1970s. From that time on it has received endorsement from the international community.

And as stated at *The Rio + 20 Conference on Sustainable Development Outcome Document 2012:*

> Democracy, good governance and the rule of law, at the national and international levels, as well as an enabling environment, are essential for sustainable development, including sustained and inclusive economic growth, social development, environmental protection and the eradication of poverty and hunger.

The Environmental Rule Of Law

This aspect of the rule of law is referred to as the "environmental rule of law". While it has not been formally defined, as is the case with other aspects of the rule of law, the following analysis of the fundamental elements requisite to encapsulate the concept include[9]:

(i) A system of laws that regulate, as far as is feasible and practicable, all human-induced actions that by themselves or collectively have a significant impact on the environment;

(ii) Consistent application of these laws over time and throughout the jurisdiction;

(iii) Effective and fair enforcement against those who break the law, regardless of the offender's socio-economic or political status.

This definition immediately highlights the key role of the judiciary in implementing the environmental rule of law. A core

9. See Elizabeth Barrett Ristroph, 'The Role of Philippine Courts in Establishing the Environmental Rule of Law' published in Environmental Law Reporter 42 ELR 108669-2012, Copyright 2012 (Environmental Law Institute, Washington DC).

duty is to safeguard and uphold our constitutional guarantees, which must include the right to a clean environment both for the present generation and the future of unborn generations, not forgetting our wildlife and other life systems, which form part of our eco-system.

While our Federal Constitution does not specifically provide for such a right, it is implicit in Article 5, which guarantees the right to life. The word "life" has been accorded a broad and liberal interpretation in our case law as explained in the case of *Tan Teck Seng v. Suruhanjaya Perkhidmatan Pendidikan & Anor* [1996] 2 CLJ 771 at 800 where Gopal Sri Ram JCA (as he then was) stated as follows:

> … I have reached the conclusion that the expression 'life' appearing in Article 5(1) does not refer to mere existence. It incorporates all those facets that are an integral part of life itself and those matters, which go to form the quality of life. Of these are the right to seek and be engaged in lawful and gainful employment and to receive those benefits that our society has to offer to its members. It includes the right to live in a reasonably healthy and pollution free environment. …

Notwithstanding this generous and accurate analysis of the definition to be accorded to the word "life", it would be ideal if our Federal Constitution is amended to expressly include a right to a clean and healthy environment as is found in numerous other modern constitutions.

After all, the environment and its preservation is an ancient wisdom that has comprised an integral part of our culture and society for hundreds of years.

Insofar as environmental legislation is concerned we have, in Malaysia, no less than thirty-eight Acts and Ordinances, as well as a sizeable quantity of subsidiary legislation relating to the environment. Our fundamental statutes include the Environmental Quality Act 1974, the Wildlife Conservation Act

2010 and the National Forestry Act 1984. Apart from this, our international environmental obligations comprise another important source of environmental law [10].

The Progress Made By The Judiciary In Enhancing The Environmental Rule Of Law

I turn now to consider the progress made by our Judiciary in enhancing the environmental rule of law.

In 2011 at the inception of my appointment as the Chief Justice of Malaysia, I attended the roundtable conference for ASEAN Chief Justices on the environment in Jakarta. The objective was to develop a common vision on the approach to be adopted by the Judiciaries in shaping the rule of law to the challenges we face in the region. This was termed the "Jakarta Common Vision".

The deliberations at the 2011 Jakarta meeting highlighted the role that the Judiciary could play in upholding and enforcing our environmental laws.

The lack of cognisance of the significance of environmental protection, and the dearth of education and sensitivity in this respect is borne out by a comparison I drew in my inaugural speech at the Opening of the Legal Year ceremony in 2012. I referred to the disparity between sentences meted out by our courts in relation to environmental offences. You may recall the contrast I drew. A man in Tumpat, Kelantan, who was convicted for being in illegal possession of a dead tiger, a protected species, was fined a mere RM7,000.00 in 2005, while a man convicted for the theft of eleven cans of "Tiger Beer" and "Guinness Stout" worth RM70.00 in 2010 was sentenced to five years imprisonment. It illustrates just how misplaced our value system was then, as well as how little exposure and awareness there was

10. See Maizatun Mustafa, *Environmental Law in Malaysia* (Wolters Kluwer Law & Business).

amongst our magistrates and judges[11]. With the implementation of our environmental courts, our training programmes and our national strategy workgroups, these attitudes have, hopefully, changed.

I was therefore impelled to first deliberate upon, and then establish the environmental court for our jurisdiction. *Vide*, Practice Direction of the Chief Registrar No. 2/2012, the environmental courts became a reality. Initially, some forty-two Sessions Courts and fifty-three Magistrates' Courts were assigned as environmental courts nationwide. Although the jurisdiction of these courts was confined to criminal cases, the scope of their enforcement function was wide, spanning thirty-eight Acts and Ordinances and seventeen Regulations, Rules and Orders.

Subsequently on 1 January last year, Special Environmental Courts for civil matters were established throughout Malaysia. The High Courts, Sessions Courts and Magistrates' Courts in all thirteen states have been assigned to hear civil environmental cases. The object of implementing a nationwide system at multiple levels in the court hierarchy is to ensure that access is available to the population at large to lodge grievances or file claims seeking redress for a wide range of complaints. It is my hope that in the not too distant future, environmental case-law handed down by our courts will add, in incremental stages, to a corpus of environmental law that conserves our distinctive land, as well as contribute to international environmental law.

In 2012 we hosted and co-organised the 2nd ASEAN Chief Justices' Roundtable on Environment and Enforcement in Malacca. From this meeting, the ASEAN judiciaries agreed to establish a technical working group of judges from each ASEAN judiciary, to formulate a consensus on the terms of the memorandum of understanding towards attaining the Jakarta Common Vision.

11. See Tun Arifin Zakaria's 'Opening of the Legal Year Speech 2012' at paragraph 48, page 25.

This was followed by our co-organisation of the 1st Asia and Pacific International Colloquium on the Environmental Rule of Law – Defining a New Future for Environmental Justice, Governance and Law in Putrajaya, in 2013. The colloquium culminated in the issuance of the Putrajaya Statement. The statement reaffirms the concept of the environmental rule of law and highlights the importance of this aspect of the rule of law in relation to sustainable development goals. It supports the realisation of all other goals and fairness to future generations. The Statement also identifies the constituent elements of the environmental rule of law to include, *inter alia*, adequate and implementable laws, access to justice and information, public participation, accountability, transparency, liability for environmental damage, fair and just enforcement and human rights.

The outcome of this meeting amounted in effect to the first step towards building, through a regional process led by UNEP, global consensus on the precise benchmarks for the further development, implementation and measurement of the environmental rule of law.

In recognition of our interest and participation in the environmental rule of law, I was honoured, on behalf of Malaysia, to have been appointed as Co-Chairperson of the World Congress on Justice, Governance and Law for Environmental Sustainability in 2012 in Rio de Janeiro, Brazil which was held on the sidelines of the Rio + 20 Summit.

The country was further honoured by my appointment as a member of the International Advisory Council for Environmental Justice under the United Nations Environment Programme in 2013 and this continues to date.

To further enhance and educate the members of the Judiciary and the Judicial and Legal Service, we established the National Judicial Working Group on the Environment in 2015. Its function is to implement the Jakarta Common Vision and the Hanoi Action Plan.

This concept has been filtered down to the State and District levels by the establishment of similar judicial working groups on the environment, so as to encourage a proliferation of knowledge to all levels of the Judiciary. These working groups have organised numerous environment-related activities.

Ultimately we in Malaysia hope to follow in the footsteps of nations like India and the Philippines who have made giant strides in environmental law and enforcement.

The Past Year, 2016

Permit me to now touch on the events of the past year.

This last year has, as always, been a challenging one for the Judiciary. We had to adjudicate upon issues as far ranging as:-

(i) religion and conversion rights which look set to continue through the current year;

(ii) disputes testing the constitutionality of newly introduced statutes such as the SOSMA; and

(iii) the constitutionality of specific sections in older statutes, not to mention other public law litigation.

Issues of this nature affect not only those parties directly before the court but carry considerable significance to the population of the country as a whole.

Notwithstanding that these issues are weighty, and that the results of adjudication have given rise to both criticism and unhappiness on the one hand, as well as approval and acclaim on the other, judges remain cognizant of their continuing constitutional duty to exercise their judicial powers so as to ensure that litigants are given an opportunity to be heard, and that justice is dispensed *vide* their judgments, after according mature consideration to the dispute and arguments raised. This is the core of our judicial function and we continue to strive to improve the system and ourselves further, in order to enhance the rule of law.

Workload Of The Courts

In terms of performance, the judges at all levels have, largely, performed admirably. The appellate courts have maintained their efficiency levels as per previous years.

The High Court Judges and Judicial Commissioners have a significant task in managing their caseloads efficiently within specific time frames with no failure to consider all salient issues and the law. They too have performed commendably, by and large.

Equally, the Sessions Court Judges, who, like the High Court Judges, carry a heavy load in terms of adjudication by trial, have made good progress with their disposals in 2016. The Magistrates Courts too have performed as well as they have in the past five or so years.

Federal Court

More specifically, in the Federal Court a total of 702 leave applications were registered, showing an increase of 16% compared to the previous year. The Federal Court succeeded in disposing a total of 762 leave applications out of 1281 pending, leaving a balance of 519. For the record, a total of 168 leave applications were allowed in 2016 that is 22% of total leave applications disposed of.

As for civil appeals, 155 cases were registered in 2016 showing a decrease of 2% compared to the previous year. Disposal amounted to 157 civil appeals out of 361 pending.

With respect to criminal appeals, there were 256 registrations showing a decrease of 8% compared to previous year. 293 criminal appeals were disposed of out of 359 pending cases.

The Federal Court produced 29 reported grounds of judgment in the course of 2016.

Court Of Appeal

In the Court of Appeal in 2016, the registration of cases showed an increase of 20% compared to the previous year for both civil and criminal appeals.

A total of 4,091 appeals were disposed of against 4,481 cases registered, resulting in a disposal percentage of 92%.

In the Court of Appeal, all matters are current save for 7% of the case load, which balance is expected to be completed by March this year.

In the same period, Judges of the Court of Appeal produced 465 reported grounds of judgment of which 284 grounds were in respect of civil appeals and 181 grounds were in respect of criminal appeals.

High Court

The High Court of Malaya achieved a disposal rate of 67%, while the High Court in Sabah and Sarawak achieved a disposal rate of 65.3%.

Subordinate Courts

Similarly, the Subordinate Courts in West Malaysia achieved a disposal rate of 85.6% while a disposal rate of 85.34% was achieved by the Subordinate Courts in East Malaysia.

Improving The Administration Of Our Courts And Capacity Building

Some of the other developments that have been implemented in the Judiciary during my tenure, from September 2011 to date include:

(A) The Establishment Of The Judicial Academy

It was set up under the auspices of the Judicial Appointments Commission. In-house training has been, and continues to be, conducted by judges for judges. The Academy has also invited foreign judges from time to time to share their experiences and knowledge on specific areas of the law. It has also organised outreach programmes held variously in Taman Negara, Cameron Highlands and Kundasang respectively. These programmes were also aimed at bringing judges closer to nature and to raise awareness on the significance of the environment.

(B) The Introduction Of The Integrated Rules Of Court 2012

We also introduced the integrated Rules of Court 2012. A committee comprising the Bench, the Bar and the Attorney General's Chambers had for some time been carrying out work to simplify and bring about a common set of rules of court for both the High Court and the Subordinate courts. Work on this was completed in 2012, and the Rules of Court were brought into force on 1 August 2012. The rules have now been in force for four and a half years and have achieved the objective of making litigation less complex and technical.

(C) The Creation Of Specialised Courts

(a) Environmental Court

I have already spoken about the background to the creation of the environmental court. Several other specialised courts were established between September 2011 and 2016.

(b) Anti-Profiteering, Goods And Services Tax Court

With the coming into force of the Goods and Services Tax Act 2014 on 1 April 2014, specialised courts were established throughout Malaysia to deal with cases falling within the purview of the statute. It assists in expediting the disposal of GST related cases.

(c) Anti-Terrorism Court (ATC)

The Anti-Terrorism Courts were specifically set up to handle cases related to extremism, such as the Islamic State (IS) militancy, as well as security matters. Five judges of the High Court, four in Kuala Lumpur and one in Sabah, have been selected and assigned to hear these cases. The setting up of this dedicated court in 2016 has helped to expedite the trial process and to curb the spread of extremism and threat of militancy in this country.

(d) Construction Court

The Construction Court was set up in April 2013 at the behest of the Construction Industry Development Board (CIDB) and the Bar. As construction is one of the major segments that contribute to the growth of the Malaysian economy it was felt that a specialised court would be beneficial to the industry. This would assist in expediting the disposal of construction industry cases. These specialised courts are located at the Kuala Lumpur Court Complex and the Shah Alam Court Complex. The courtrooms are substantially modeled after that of the Technology and Construction Court in London. They are equipped with suitable electronic and visual aids and other improved facilities specifically to facilitate the hearing of construction matters. In January 2016, an equivalent appellate court was set up at the Palace of Justice specifically to hear construction appeals.

(e) Coroner's Court

Due to widespread public concern over the increase in custodial deaths, the Judiciary established fourteen dedicated Coroners' Courts in April 2014. These courts were tasked with independently inquiring into the circumstances under which persons had died. Fourteen senior Sessions Court Judges were appointed throughout Malaysia as coroners. These cases are expected to be disposed of within a nine-month timeline. A coroner is assisted by a medical doctor in completing his work.

(f) Cyber Court

The Cyber Court was set up on 1 September 2016. The court, which is located in the Kuala Lumpur Court Complex, specializes in hearing cyber criminal cases. This includes bank fraud, hacking, falsifying documents, defamation, spying, online gambling and cases related to pornography. These courts are essential to address the increasing number of cyber crime offences. While the court is currently restricted to hearing criminal cases, it will soon expand to cover civil cases.

(g) Fast Track for Street Crime Offences

The Judiciary introduced the fast track proceedings at the subordinate courts for street crime offences which include cases involving robbery, snatch theft, hit and run accident and cheating on taxi fares. The nature of these crimes has a direct impact on public safety and foreign tourists. *Vide* Practice Direction No. 1 of 2015 issued by the Chief Judge of Malaya, the timelines for the disposal of these cases is stringent.

(D) Issuance Of Press Summaries Of The Grounds Of Judgment Of The Federal Court

Since 2012, the Federal Court has been started issuing press summaries of the grounds of judgment of the court. The primary purpose is to assist the public to comprehend the reasons for our decision. It is a part of our efforts to make the judicial process more transparent.

(E) Enhancing The Use Of Technology In The Court Delivery System

The current E-Court systems face critical challenges as the usage of the system has grown significantly since its implementation in 2009. This has been addressed through the progressive implementation of E-Court Phase II. This phase is equipped with new features that will benefit the stakeholders.

Currently only eight sites enjoy the use of the E-Court system. With Phase II, such use will be extended throughout Peninsular Malaysia. The system is also to be extended to both the High Courts and the Subordinate Courts.

E-Court Phase II have additional modules which were not available in Phase I. Those modules include online filing for criminal matters and Power of Attorney, an appeal module for the Court of Appeal and Federal Court, e-Lelong, integration with the Bar Council for the Practising Certificate Module, as well as system integration with PDRM, JPJ, JKPTG, Insolvency Department and JPN. We do however require more funding to update these systems to better serve the public.

The E-Bidding system will be developed to replace the manual public auction process in court and is to be launched in 2017. It is expected to make the bidding process more transparent as it will be open to more prospective bidders. Importantly this system is expected to eliminate any syndicate that seeks to interfere with the bidding process, which could lead to artificial pricing at the expense of the chargors.

(F) Establishing The Inns Of Court Malaysia

The Inns of Court, Malaysia (ICM) was established on 10 November 2016. It is a professional membership body comprising judges, lawyers, jurists, legal academics and other legal professionals from all backgrounds. The ICM, as it is known, strives to be "a home for the whole spectrum of law professionals".

Like the Inns of Court in the United Kingdom and the United States of America, the ICM serves as a venue for talks, dining sessions and law libraries, designed for members to share and discuss their views on legal issues.

(G) The Journal Of The Malaysian Judiciary

In 2016, the Judiciary also launched a publication entitled the Journal of the Malaysian Judiciary. Issues are published biannually. The objective is primarily to enable our judges to author and publish articles in areas of the law that are of interest to them, as well as papers they have delivered at conferences and seminars. This is the first step towards the creation of the Judiciary's own publishing line, where judges may choose to author a variety of publications ranging from monographs to books on particular areas of the law.

International Engagement

In terms of international engagement, some of the significant developments that have transpired include for example the formation of the Council of ASEAN Chief Justices (CACJ). This Council, formerly known as the ASEAN Chief Justices' Meeting (ACJM), was conceived by The Right Honourable Chief Justice

of Singapore, Sundaresh Menon, in 2013. The objective was to provide a forum for the ASEAN Chief Justices to hold discussions on common concerns of ASEAN judiciaries and engender mutual cooperation. I was honoured to be one of the pioneer Chief Justices who participated in the founding of this Meeting of Chief Justices, as I attended the Inaugural Meeting in 2013.

In 2014, again I was honoured on behalf of Malaysia to be appointed as the Chair of the Council when we hosted the second ACJM in Kuala Lumpur.

At its third meeting in the Philippines, Working Groups were formed to participate in judicial training and education, case management, court technology, cross-border disputes involving children and civil processes, as well as the ASEAN Judiciaries Portal (AJP) project. Malaysia has been tasked to lead the Service of Civil Processes within the ASEAN Working Group to facilitate the service of civil processes within ASEAN. We have also been asked to lead the court technology and case management aspects of this harmonisation programme.

Support For The Asean Legal Information Centre (Asean LIC)

The Malaysian Judiciary also supports the Asean LIC, a regional movement led by the University of Malaya and MKMS. The Asean LIC aggregates and publishes Asean legal information from judgments and legislation to legal news, reports and articles. The objective is to facilitate free, easy and meaningful access to Southeast Asian legal materials. This will contribute towards a better understanding within ASEAN of our varying laws and legal trends and promote the harmonisation of Asean laws.

Improving The Quality Of Judgments

When I took my oath of office as the Chief Justice, one of my main goals was to improve the quality of judgments handed down. My predecessor, Tun Zaki Tun Azmi, had, with his transformation plan, which was executed admirably, efficiently

cleared the backlog of cases that had plagued the courts in Malaysia for decades. My task was to take the next step of improving the quality of judgments at all levels of the Judiciary. In short, to "polish the silver", as it were.

I have sought, with assistance from my brother and sister judges at the Federal Court, to "polish the silver", by way of further judicial education and appraisement, amongst other methodologies. Suffice to say that while there has been improvement, the goal remains a work in progress. I trust that my successors will continue to put in place steps towards achieving that goal. Ultimately I hope we will see a time when our judgments are read and applied, not only locally, but also internationally.

Progress Of The Environmental Courts And The Law

It also remains my hope that the Judiciary will continue to embrace the concept of the environment, and its undeniable and irreversible connection with sustainable development. Increased efficiency and enforcement coupled with commensurate punishment, will have a tremendous effect in curbing illegal practices, assisting directly in the protection and conservation of our matchless environment. To this end, I would like to ask my brother judge, Tan Sri Richard Malanjum, who enjoys a similar dedication to the environment, to spearhead the drafting and introduction of a set of Environmental Rules of Court to facilitate and bolster the practice of environmental law in our courts.

That summarises not only the events of 2016 in our courts, but captures some of the highlights of my tenure.

In concluding, I go back to the beginning of my speech, and reiterate that the Judiciary will remain a bulwark for the plural society of our unique nation.

I take this opportunity to wish all of you the very best for a fruitful and progressive year ahead.

Saya akhiri ucapan saya dengan empat rangkap pantun:

Istana Kehakiman Gah Dijulang
Bangunan Kemegahan Badan Kehakiman
Untuk Menjamin Malaysia Gemilang
Kedaulatan Undang-Undang Jadi Pegangan.

Tahun Pembukaan Disambut Gembira
Mari Semua Kita Raikannya
Keluhuran Perlembagaan Asas Negara
Menjadi Tugas Kehakiman Menegakkannya.

Hembus Pawana Bayu Terasa
Alam Yang Indah Dipandang Mata
Janganlah Kita Membuang Sisa
Kelak Binasa Alam Semesta.

Indah Malam Tanpa Pelita
Terbang Beramai Si Rama-Rama
Janganlah Lupa Peranan Kita
Persekitaran Indah Tanggungjawab Bersama.

Addressing Climate Change – Evolving Legal Jurisprudence In ASEAN Region And Its Challenges

by

*Tan Sri Richard Malanjum**

Introduction

Today, climate change is no longer a mere fiction. While there were earlier declarations and treaties related to the environment[1], climate change was still then a controversial and debatable topic with both sides coming up with strong legal arguments. However, it is the United Nations Framework Convention on Climate Change (UNFCCC) 1992 that clearly demonstrated, despite it being based on the principle of reciprocity between States, the acceptance by the world community of its responsibility in addressing climate change. Hence, as a follow up to UNFCCC, the Kyoto Protocol was adopted in 1997 as an implementation tool to further the efforts of the world community. This Protocol contains rules and procedures on how to curb the amount of greenhouse gas emissions (GHG). Since then the world community and individual nations have been addressing climate change issues with the Paris Agreement on Climate Change 2015 being the latest document on the subject.

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1. For instance, the Declaration of the United Nations Conference on the Human Environment from 1972, also known as the Stockholm Conference.

There are of course skeptics who still argue that climate change is inevitable. Their view is to let the Earth takes its own course. After all Earth for the last 4.5 billion years had experienced tropical climates and ice ages many times over. Indeed the last ice age ended only about 11,000 years ago[2].

Climate Change And Us

While the skeptics may have their points, it has also been acknowledged that human activities are accelerating the climate change phenomenon[3]. It is these human (anthropogenic) activities that the world community and individual nations are attempting to regulate otherwise the Earth's lower atmosphere temperature could increase to more than 4° Celsius by the end of the 21st Century[4]. If that happens, the sea level would rise and island nations and coastal cities would mostly likely be inundated.

Based on the study in 2009 conducted by the Asian Development Bank, Indonesia by 2100 can expect temperature increase between 2.1°C to 3.4°C, the Philippines between 1.2° C and 3.9° C by 2080, Singapore between 1.7° C and 4.4° C while Thailand and Vietnam between 2.0° C and 4.0° C by 2100 respectively. And in the worst case scenario with a temperature increase by 4.0° C the sea level could increase up to 59cm[5]. If such event were to happen ASEAN cities like Bangkok, Thailand and Jakarta, Indonesia would likely be partly submerged[6].

2. http://www.metoffice.gov.uk/climate-guide/climate-change
3. The Intergovernmental Panel on Climate Change (IPCC) reported in 2014 that scientists were more than 95% certain that global warming is mostly being caused by human (anthropogenic) activities, mainly increasing concentrations of greenhouse gases such as carbon dioxide (CO_2).
4. http://www.un.org/climatechange/blog/2015/03/will-weather-like-2050/.
5. Asian Development Bank, The Economics of Climate Change.
6. http://environment.asean.org/asean-working-group-on-climate-change/ & https://www.ipcc.ch/publications_and_data/ar4/wg2/en/ch10s10-4-3.html.

In fact the "Climate Change Vulnerability Mapping for South East Asia" conducted with the assistance of international organizations identified all regions of the Philippines, the Mekong Delta region of Vietnam and the Bangkok region, all of Cambodia, North and East Lao PDR, west and south Sumatra, western and eastern Java would be adversely exposed to sea level rise[7].

And according to the report "Climate Change 2014: Impacts, Adaptation and Vulnerability", as a result of global warming, people in Asia would experience "heat stress, extreme precipitation, inland and coastal flooding as well as drought and water scarcity, pose risks in urban areas with risks amplified for those lacking essential infrastructure and services or living in exposed areas"[8]. Heat stress, for example, could decrease productivity as it has significant impact especially on the outdoor workers. Worst hit will be Singapore and Malaysia, which could experience decrease in productivity by up to 25%. Expected decrease in productivity will vary across the region, with Indonesia predicted at 21%, Cambodia and the Philippines at 16% and Thailand and Vietnam at 12%[9].

Vector-borne diseases such as Zika, dengue and malaria will also likely to flourish as a result of global warming.

Three other factors demonstrate how climate change exposes humans to vector-borne diseases[10]:

7. Moving forward in the climate change policies and practices – Wan Portia Hamzah – Post-2020 Climate Change Regime Formation – Routledge.
8. http://ipcc-wg2.gov/AR5/images/uploads/WGIIAR5-PartA_FINAL.pdf
9. http://www.todayonline.com/world/asia/global-warming-increase-heat-decrease-productivity-south-east-asia-report.
10. http://climatenexus.org/learn/public-health-impacts/climate-change-and-vector-borne-diseases.

i) Rising global temperatures can lengthen the seasons and increase the geographic range of disease-carrying insects. As temperatures warm up, mosquitoes and other warm-weather vectors can move into higher altitudes and new regions farther from the Equator. For instance, in some regions in the United States, warming is lengthening the season for Zika-carrying mosquitoes;

ii) Increased rainfall, flooding and humidity create more viable areas for vector breeding and allows breeding to occur more quickly as eggs hatch faster in hotter climates. For example, officials braced for an increase in risk for Zika and West Nile virus infections after the massive flooding event in Louisiana in August 2016 which increased the breeding habitats for Aedes mosquitoes; and

iii) Human migration exposes people to viruses to which they are not immune. As populations migrate in response to climate change they bring diseases to new regions and urban areas. Infectious diseases spread more quickly in overcrowded urban areas.

Causes Of Climate Change

In addressing climate change from the legal perspective it is necessary to determine its cause or causes. Some of the causes may be beyond human control. They may be governed by the laws of Nature in which case there is no issue of evolving legal jurisprudence. But as stated earlier, human activities do have a major role either in triggering or accelerating climate change. The major cause in the rise of global temperature is human-caused greenhouse gas (GHG) emissions by the burning of fossil fuels and deforestation[11]. In this sphere, legal jurisprudence can evolve as measures are taken to check, control and mitigate the effects on climate by those human activities.

11. http://www.conservation.org/what/pages/climate.aspx – Deforestation accounts for about 11% of global greenhouse gas emissions caused by human.

It has also been scientifically established that there is a causal link between rapid industrialization and deforestation and the rise in Earth's temperature for the past 70 years. This is indicated when the 2011 Durban Conference of Parties (COP17) concluded a set of agreements including the "Durban Platform for Enhanced Action" that sets the agreed target limit of carbon emission by 2020 to not more than 2ºC above the pre-industrial levels. It is generally accepted that life can still be sustained without irreversible damage at that level of temperature increase[12].

Basically there are two main identifiable culprit groups of human-related activities that are responsible for global temperature increase, namely, the unchecked emission by fossil-fueled energy generating stations, automobiles and factories on the one hand while on the other hand it is the unmitigated deforestation.

While ASEAN Member States are not as industrialized as the developed nations, they have a fair share in the blame on climate change. Based on the 2013 report, the region contributed about 4% in GHG emission[13]. The blessing of green tropical forests with abundant biodiversity of the region has triggered the human greed for hardwood and agricultural produce. Indeed Southeast Asia region is losing about 1.2% of its remaining forest area each year with Cambodia, Indonesia and the Philippines reporting annual losses of up to 2% over the last five years[14]. Malaysia has lost an estimated 14.4% (4.5 million ha) of its forests and tree cover from 2000-2012[15]. The culprits are the logging, legal and

12. Note 7.
13. EIA's Report on Southeast Asia Energy Outlook 2015 – page 35. Although ASEAN's share of global emission is rather small, but it almost doubles by 2040.
14. http://www.unep.org/vitalforest/Report/VFG-15-The-forests-of-southeast-asia.pdf
15. Carol Yong, SACCESS and JKOASM, "Deforestation Drivers and Human Rights in Malaysia – A National Overview and two-sub regional Case Studies" 2014.

illegal and land clearing, including the practice of open burning on large scale for the planting of oil palm and other crops. And during the dry seasons, uncontrollable wildfires, especially in the peatland areas, would degrade vast areas. Loggings cause the loss of the forests while the open burning for oil palm and other crops and wildfires cause the loss of forests and biodiversity as well.

It is therefore not surprising that most, if not all, of ASEAN Member States have been addressing climate change not only on GHG emissions but also through the prism of deforestation and the methods employed.

Evolving Legal Jurisprudence

At the outset it should be appreciated that the 10 Member States of ASEAN are still categorized as developing countries with the exception of Singapore and are quite diverse in terms of political, administration and legal and judicial systems. On judicial system some adopted the common law system while the others took the civil law system. As such one should not hope to find from the ASEAN region a robust judicial activism in addressing climate change unlike in some developed nations. Further, climate change litigations that involved attempting to advance policy which seem to be gaining traction in the United States of America are yet to be conceived or at best only at a gestation stage in the ASEAN region. However, the European and Australian approach in climate change litigations, that is focused almost exclusively on enforcing existing domestic environmental legislation, including by challenging governmental failures at enforcement, is not too alien to the judiciaries of ASEAN Member States[16].

Notwithstanding, legal responses to climate change in the ASEAN region are evolving. Being very much aware on the challenges posed by climate change, ASEAN Member States are

16. Example – *Oposa v. Factoran* GR No 101083 (SC, 30 July 1993) (Phil).

not only increasingly involved at the international level in addressing climate change, they are also formulating laws in order to implement their international obligations, domestic key policies and set goals to meet the impact of climate change[17]. In other words, the focus is also on enhancing adaptation to the impacts of climate change.

It should be noted as well that when one speaks of legal jurisprudence in addressing climate change it should not be focused only on the judiciary. The roles of the Legislative and Executive branches of government are equally important. This is because key policies and legislation are the essential framework to achieve the goals in addressing climate change. With clear policies and legislation, the judiciary will be able to play an important role in interpreting and enforcing those laws so as to ensure that the rationale of those laws are realized effectively.

The primary approach currently adopted in addressing climate change in the ASEAN region is very much based on legislative-executive actions. International, regional and at times bilateral agreements, conventions, protocols, declarations and treaties have been either signed and ratified or signed or noted by ASEAN Member States. And in fact the ASEAN Vision of 2020 calls for "a clean and green ASEAN" with fully established mechanisms to ensure protection of the environment, sustainability of natural resources and high quality of life of people in the region. The follow up of such Vision is verified by the many Declarations and Statements made by the Member States, namely:

- ASEAN Declaration on Environmental Sustainability (13th ASEAN Summit in 2007);
- ASEAN Declaration on COP13 to the UNFCC and CMP-3 to the Kyoto Protocol (13th ASEAN Summit in 2007);

17. Stockholm Environment Institute, 'Climate change adaptation readiness in the ASEAN countries' Discussion Brief.

  - Singapore Declaration on Climate Change, Energy and the Environment (3rd EAS Summit in 2007);
  - Joint Ministerial Statement of the 1st EAS Energy Ministers Meeting in 2007;
  - Ministerial Statement of the Inaugural EAS Environment Ministers Meeting (2008);
  - ASEAN Joint Statement on Climate Change to COP-15 to the UNFCCC and CMP-5 to the Kyoto Protocol (15th ASEAN Summit in 2009);
- ASEAN Joint Statement on Climate Change 2014; and
- ASEAN Agreement on Trans-boundary Haze Pollution.

At the domestic level ASEAN Member States have enacted various legislation and regulations intended directly or indirectly to tackle climate change.

Singapore

In order to tackle the haze crisis in South East Asia, Singapore has made a bold move with its Trans-boundary Haze Pollution Act 2014 (the Act). This is an extra-territorial action because the Act also claims jurisdiction over non-Singapore entities operating outside Singapore, ie, companies or individuals with little or no link to Singapore. Examples of potential accused parties or defendants would include Indonesian or Malaysian companies operating in Indonesia. The bases for Singapore's jurisdiction or the claimed "nexus" in such cases would have to reside in the "passive personality" principle, the "protective" principle, and/or the "effects doctrine", given that the harm of haze pollution is felt in Singapore by Singapore citizens. Hence, for example a company on the ground in Indonesia is burning the land and if there is evidence to link it to any of the Singapore-based companies, Singapore can take action against the latter based on the Act if they "participate in the management or operational affairs" of the company on the ground. But the problem is securing the evidence. It would be very much dependent on the cooperation of Indonesia. So far there has been no reported

prosecution although there are investigations ongoing against several firms[18]. Perhaps Singapore may also consider applying the precautionary principle as a response to the "problem of proof"[19]?

The Act was inspired by a piece of legislation in the United States of America (U.S.) known as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as "Superfund". CERCLA is a U.S. federal law that authorises federal natural resource agencies, states and private individuals to recover natural resource damages caused by releases of hazardous substances. CERCLA also establishes a clean-up authority that is tasked with the powers to direct the cleaning up of sites contaminated with hazardous substances. In 2006, in the case of *Pakootas v. Teck Cominco Metals Ltd* ("*Pakootas*"), the Ninth Circuit Court of Appeals in the U.S. ruled that a CERCLA case could proceed against a Canadian lead-zinc smelter that discharged hazardous untreated effluents into the Canadian part of the Columbia River that carried the effluents southwards into the U.S. State of Washington. The *Pakootas* case was significant in that it was the first to establish that a U.S. court had jurisdiction over a foreign entity for operations conducted abroad that would have been permitted in its own country (Canada) but which violated U.S. law. In January 2008, the U.S. Supreme Court denied *certiorari* (ie, declined to hear the case on appeal) and allowed the Ninth Circuit ruling to stand. CERCLA is a remedial statute that aims to address contamination occurring in the U.S. alone. It was never meant to regulate the activities at the source in a foreign country like Canada, something that was wholly within the province of Canadian law. Hence, what was at issue was the smelter's failure to prevent and address the harm occurring in the U.S. – in short, to clean up the mess in the U.S.

18. Alan Khee-Jin Tan, 'The "Haze" Crisis in Southeast Asia: Assessing Singapore's Trans-boundary Haze Pollution Act 2014'.

19. *Gray v. Minister for Planning, Director General of the Department of Planning & Centennial Hunter Pty Ltd* [2006] NSWLEC 720.

that it had created. On this point, the District Court had supported the extra territorial application of CERCLA. However, the Ninth Circuit clarified that the release of hazardous substances complained of had occurred within the U.S. and therefore involved a domestic as opposed to extraterritorial application of CERCLA. The *Pakootas* case was eventually resolved when the U.S. government and the smelter entered into a settlement agreement pursuant to which the smelter's U.S. subsidiary agreed to fund and perform the requisite remedial feasibility studies.

Anyway, Dr. Vivian Balakrishnan, Singapore's Minister responsible for the environment, has reiterated that the Act is "no silver bullet". He further added that there would be challenges faced. Certainly he is being very frank and realistic in order to manage public expectations of immediate or even short-term relief[20].

Therefore, only time will tell whether the Act is a silver lining or silver bullet to the haze problem that threatens to engulf Singapore and Malaysia annually.

Be that as it may, the Act proves that human society is quite reactive, in that it only acts swiftly when immediate or imminent harms are felt. In the case of Singapore, the trigger is the annual haze problem that invariably contributes to climate change.

Indonesia

Indonesia has laws governing the issues of open burning and deforestation. They are as follows:

a. Forestry Law No. 41 0f 1999, Article 50

   i. Intentional setting off of fires – fifteen years' imprisonment and fine of 5 billion Rupiah; and

20. Article by Dr. Raman Letchumanan, 'Singapore's Transboundary Haze Pollution Act: Silver Bullet or Silver Lining'; https://www.rsis.edu.sg/rsis-publication/nts/co15021-singapores-transboundary-haze-pollution-act-silver-bullet-or-silver-lining/#.V7rTNaLl8To.

ii. Negligent setting off of fires – five years' imprisonment and fine of 1.5 billion Rupiah;

b. Law for Protection and Management of the Environment (Law No. 32 of 2009)

i. Minimum punishment of 3 years' imprisonment and fine of 3 billion Rupiah; and

ii. Maximum punishment of 10 years' imprisonment and fine of 10 billion Rupiah.

However, from the above, the challenge is that the laws lead to confusion for prosecutors as the various punishments prescribed for forest and land fires have not been properly reconciled. It is unclear which Law is the overriding provision – the prosecutors have been charging different perpetrators under both Laws but mostly the Forestry Law[21].

From the judicial aspect, the Indonesian courts have recognized strict liability for actions that cause a "serious threat to the environment"[22]. Further, in recognising the rights of the Indigenous communities over their customary lands, the Indonesian Supreme Court had thus indirectly given effect to in protecting and preserving the forests[23].

Some other interesting cases decided by the Indonesian courts are the decision of the Bandung District Court, Dec. No. 49/Pdt.G/2003/PN.BDG (4 September 2003), upheld on appeal, Supreme Court, Dec. No. 1794 K/Pdt/2004 (22 January 2007) (known as the "Mandalawangi Landslide" case) where the court not only

21. See fn17 at page 12.

22. Current Legal Challenges in Climate Change Justice - Achieving Justice and Human Rights in an Era of Climate Disruption www.ibanet.org/Presidential Task Force Climate Change Justice and Human Rights.

23. The case of *Aman and two others* – Putusan Nomor 35/PUU-X/2012.

relied on the precautionary principle[24] but also ruled that even though the precautionary principle was not part of Indonesia's legislation, it was jus cogens, that is, it is a fundamental principle of international law and an accepted norm from which no derogation is permitted.

The decision marked the first time the Indonesian courts had applied the "precautionary principle" to establish causation between the company's activities and the landslide. The application of this principle was considered as judicial activism since it was not expressly stated in the relevant environmental legislation but only recognised in various international declarations that Indonesia's Legislature had ratified.

Briefly the facts of the case are that on 28 January 2003 heavy rain poured on Mount Mandalawangi in Garut, West Java. After several hours of heavy rain and at about 10pm landslide and flood flowed from the mountain thus destroying some villages below, claiming fifteen human lives and forcing the villagers to leave their homes and properties. For some years after the disaster the villagers sought for compensation from the Government (ie, the President, the Minister of Forestry, the

24. Principle 15 Rio Declaration: 'In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. 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'.

    'Principle 15 codified for the first time at the global level the precautionary approach, which indicates that lack of scientific certainty is no reason to postpone action to avoid potentially serious or irreversible harm to the environment. Central to principle 15 is the element of anticipation, reflecting a requirement that effective environmental measures need to be based upon actions which take a long-term approach and which might anticipate changes on the basis of scientific knowledge'; www.gdrc.org/u-gov/precaution-7.html.

Governor of West Java, and the Regent of Garut) and PT. Perhutani, a state-owned forestry company operating in the area of Mount Mandalawangi. It was the Plaintiff's case that the Government had failed to monitor the activities of the company in managing the forest and had converted the protective forest into production forest. As a result of such poor management there was a landslide after extreme rainfall. The court found conflicting expert witnesses on the question of whether the landslide was due to extreme rainfall or due to Perhutani's inappropriate management of the resource under its control. This, according to the court, amounted to scientific uncertainty concerning the exact cause of the landslide. To resolve the problem the court relied on the precautionary principle adopted in Principle 15 of Rio Declaration. The court stated that although this principle was not included in the Indonesian environmental legislation the court could still rely on it as necessary to guide its decision. The court found that by invoking the precautionary principle the liability rule had shifted from the negligence rule to one of strict liability[25]. The ruling implied that the reliance on the precautionary principle allowed the court to reject the natural disaster defence submitted by the company.

Another case decided by the Indonesian court was the bush fire case of *State v. Pt. Adei Plantation/Bangkinang Forest Fires* [2001].

The case was the first where the panel of judges applied the principle of corporate liability. The Bangkinang District Court ruled that officers of the company were guilty of intentionally committing acts resulting in pollution and environmental degradation. The High Court and Supreme Court of Indonesia upheld the decision.

25. 'When an activity threatens harm to human health or the environment, precautionary measures must be taken'. 'Under the Precautionary Principle it is the responsibility of the proponent of an action to establish that a proposed activity will not result in harm' - precautionarygroup.org/precautionaryprinciple.html.

Malaysia

Article 5(1) of the Malaysian Federal Constitution which reads "No person shall be deprived of his life or personal liberty save in accordance with law" has been given fresh interpretation by the Malaysian Court of Appeal in the case of *Tan Teck Seng v. Suruhanjaya Perkhidmatan Pendidikan* [1996] 1 MLJ 261. The Court opined on the expression "life" therein as thus:

> The expression "life" incorporates all those facets that are integral part of life itself and those matters which go to form the quality of life ... it includes the right to live in a reasonably healthy and pollution free environment.

In so doing as it did the Court has recognised that it is a constitutional right of a person to have healthy and clean air. Thus, any person that infringes such right by carrying out open burning or allowing excessive smoke emission of his automobile, both of which activities could contribute to climate change, can be made liable.

Although the Court of Appeal in the case of *Ketua Pengarah Jabatan Alam Sekitar & Anor v. Kajing Tubek & Ors & Other Appeals*[26] (commonly known as the Bakun Dam case) declared that the Environmental Quality Act 1974 did not apply to the State of Sarawak due to the doctrine of federalism in relation to the need for Environmental Impact Assessment (EIA) before the construction of the dam could begin, the case nevertheless highlighted the importance of EIA. As such the forests should not be simply cleared.

As in Indonesia, the Malaysian Federal Court, the apex court, has also recognised claims on native customary rights land[27]. The effect of such recognition is that vast areas of forests are preserved where the native communities can forage for their daily needs. Thus, in turn, deforestation is being checked.

26. [1997] 4 CLJ 253.

27. *Superintendent of Land & Surveys Miri Division & Anor v. Madeli bin Salleh (suing as Administrator of the Estate of the Deceased, Salleh bin Kilong)* [2008] 2 MLJ 677; [2007] 6 CLJ 509 FC.

There are also domestic legislation enacted in Malaysia that address climate change directly or indirectly. Some of them are these:

a. Renewable Energy Act 2011 (Act 725) that provides for the establishment and implementation of a special tariff system to catalyse generation of renewable energy. The clean Energy Cash-back schemes are introduced *via* this piece of legislation. This approach could help reduce dependency on fossil-fueled generating stations for energy; and

b. Forest and Land Use such as Forestry Act 1984 and Peat Soil Management to prevent forest fires – these laws help in controlling open fire and forest fires thus mitigating deforestation.

Moves to regulate backyard open burning with a compound penalty is also being finalised while plantation operators that practise slash - and – burn could be made to pay compound fees up to RM500,000.00.[28]

The Courts in Malaysia have also been sensitized on the importance of protecting the environment including the impacts of climate change. Emphasis has been made to all judges and judicial officers on the importance of imposing deterrent sentences on offenders in order to send a clear message to the public. In fact Judges and judicial officers have been invited to visit the many national parks and forest reserves to appreciate the forests and their beauty. The purpose is to create awareness especially in those who have been living in cities throughout their lives. It is not surprising that after those visits many have shifted their perceptions on the roles and importance of the trees and forests to our Earth. Such shift can be gleaned from the serious attention they are now giving to environmental cases including meaningful and deterrent sentences imposed upon those convicted for illegal logging and open burning. Further, the

28. http://www.theborneopost.com/2016/08/31/wan-junaidi-indonesia-has-measures-to-tackle-trans-boundary-haze/.

setting up of the Malaysian Environmental Court not only to deal with criminal offences but also civil matters related to the environment is another proactive step taken by the Malaysian Judiciary in protecting the environment including addressing climate change. Just a few years ago, environmental cases were given a very casual attention almost at par with traffic offences and considered as mere technical offences. It is no longer true today. This is largely due to the result of active participation by the Malaysian Judiciary in the ASEAN Chief Justices' Roundtable on Environment spearheaded by ADB.

Recently on 8 September 2016, in Sandakan, Sabah, Malaysia, a foreigner was sentenced to two years imprisonment for illegal logging and unlawful possession of Gaharu wood[29]. Had the case been heard a few years ago the offender might have been only sentenced to a minimum fine of a few hundred ringgit.

Due to the active role played by the Malaysian Judiciary in environmental matters it is interesting to note that the other government agencies dealing with environment are also now taking active roles. They have taken steps to review all the existing legislation and have sent their officers to be trained as capable investigating officers and prosecuting officers. Indeed there has been a domino effect upon the other government agencies after the Judiciary has been sensitized on the need to protect the environment especially the forests.

The Philippines

The Philippines, a signatory to the Paris Agreement, has promised to reduce its carbon emissions by 70% by 2030 with assistance from the international community. But the initial stand of the present Administration of the Philippines was one of dismissal of the Agreement. The rationale was that the country should go for industrialization in order to create jobs

29. http://www.newsabahtimes.com.my/nstweb/fullstory/9404.

opportunities for her citizens. However recent developments seemed to show that the rigid stand has softened. In a news report dated 22 July 2016, the President was reported to have said that he has "misgivings" about the international climate pact. However, he is ready to talk if the Agreement takes into consideration his plans for the country's economy[30].

In spite of the apparent misgivings expressed by the current Administration it must not be overlooked that the Philippines is one of the pioneers when it comes to climate change adaptation[31]. The country has implemented significant policies to adapt the issues on climate change. She is highly susceptible to hydro-meteorological hazards and other natural destructive phenomena such as typhoons and flooding. Such unfortunate circumstances are aggravated by the high percentage of poverty.

The framework is provided by the Climate Change Act 2009, the National Framework Strategy on Climate Change (2010-2022) and the National Strategy Change Action Plan (2011-2022).

Accordingly, the legislation that have bearing on climate change are as follows:

a. Climate

    i. Climate Change Act of 2009

        1. Section 2: Declaration of Policy - "It is the policy of the State to afford full protection and the advancement of the right of the people to a healthful ecology in accord with the rhythm and harmony of nature";

30. http://www.rappler.com/nation/140606-duterte-paris-climate-change-agreement.

31. Stockholm Environment Institute, "Climate Change Adaptation Readiness in the ASEAN Countries" – Philippines and Vietnam are the adaptation pioneers in ASEAN.

2. Section 4: Creation of the Climate Change Commission;
3. Section 8: Climate Change Office;
4. Section 10: Panel of Technical Experts;
5. Section 13: National Climate Change Action Plan - "The Commission shall formulate a National Climate Change Action Plan …";

b. Energy

i. Renewable Energy Act (2008)

1. Section 2: Declaration of Policies -

Accelerate exploration and development of renewable energy resources and increase utilization of renewable energy;

2. Section 4: Renewable Portfolio Standards -

Fraction of electric power must be supplied from eligible Renewable Energy (RE) Resources;

3. Section 5: Feed-in Tariff System;
4. Section 10: Renewable Energy Market;
5. Rule 5: General Incentives and Privileges for Renewable Energy Development;

c. Philippines Clean Air Act of 1999

i. Section 3: Declaration of Policies -

Holistic national program of air pollution management;

ii. Section 4: Recognition of Rights -

1. The right to breathe clean air;
2. Right to utilize and enjoy all natural resources;

iii. Chapter 6: Fines and Penalties

1. sections 45 – 48; and

d. Sustainable Management of Forest Act (2011)

i. Executive Order No. 23 -

1. Creation of anti-illegal logging task force.

Meanwhile, the Philippines Judiciary has not been just idling. The Philippines Supreme Court case of *Oposa et al. v. Fulgencio S. Factoran, Jr. et al.*, Supreme Court of the Philippines, G.R. No. 101083, 30 July 1993 had effectively imported the principle of intergenerational equity into its procedural doctrine, an essential principle for effective climate change governance.

Thailand

The Kingdom of Thailand has also been active in addressing climate change especially through laws and other administrative actions. Some of them are these:

a. On Climate Change

The establishment of a Greenhouse Gas Management Organization (TGO) B.E. 2550 (2007): The TGO functions as the Designated National Authority for CDM projects in Thailand;

b. On Energy

The introduction of the Energy Conservation Promotion Act of 1992; and

c. On Forest And Land Use

i. The National Park Act (1961);

ii. The National Forest Reserve Act 1964;

iii. The Forest Act (1941).

The Socialist Republic Of Vietnam

The Vietnam Administration has also introduced laws intended to address climate change. They are as follows:

a. The Law On Climate Change

The Decision No. 158/2008/QD-TTg Approving the National Target Program on Response to Climate Change (2008) to set out the master plan for sustainable economic development;

b. On Air Protection

The Joint Circular No. 47/2011 Providing the Management of the Import, Export of Ozone Layer-Depleting Substances According to the Montreal Protocol on Substances that Deplete the Ozone Layer (2011);

c. On Energy

i. The No. 50/2010/QH12 Law on Economical and Efficient use of Energy (2010) to promote policies that encourages organizations and households to use energy sustainably;

ii. The Decision No. 1855/QD-TTg Approving Vietnam's National Energy Development Strategy up to 2020, with a Vision Toward 2050 (2007) to promote the expansion of nuclear energy generation and consumption to between 15 and 20% of the national energy mix;

iii. The Decision No. 177/2007/QD-TTg Approving the Scheme on Development of Biofuels up to 2015, with a vision to 2025 (2007) to promote and induce industry level production of bio fuels;

iv. The No. 79/2006/QD-TTg Decision Approving the National Strategic Program on Energy Saving and Effective Use (2006) to encourage and require household level energy savings through efficient usage;

v. The Decision No. 265/QD-TTg Approving the Scheme on Building Research and Development and Technical Assistance Capacity for Atomic Energy Development and Utilization and Safety and Security Assurance (2010);

vi. The Decision No. 37/2011/QD-TTg Providing the Mechanism to Support the Development of Wind Power Projects in Viet Nam (2011) to outline the plan for wind development and provide economic incentives for expansion;

vii. The Decision No. 957/QD-TTg Approving the Master Plan on Peaceful Development and Utilization of Atomic Energy Through 2020 (2010);

d. On Forests And Land Use

i. The Decision No. 799/QD-TTg on Prime Minister Approval of Vietnam's REDD+ National Action Plan (2012) to participate in the United Nation's REDD program which seeks to reduce greenhouse gas emissions by mitigating deforestation and degradation;

ii. The No. 117/2010/ND-CP Decree on Organization and Management of the Special-Use Forest System (2010) to designate certain forests as "special-use" protected areas for conservation, research, or historical significance;

iii. The Decision No. 2730/QD-BNN-KHCN Promulgation of the Climate Adaptation Framework Action (2010) to promote agricultural development and adaptation strategies accounting for the threat of climate change; and

e. On Environmental Impact Assessment

i. The Circular No. 04/2012 Stipulating Criteria for Identification of Establishments Causing Environmental Pollution or Serious Environmental Pollution (2012) to outlines the broad assessment standards for a wide variety of environmental issues;

ii. The Law on Environmental Protection (2005) to outline environmental standards and waste standards.

The Kingdom Of Cambodia

Cambodia has also introduced several measures to address climate change but mostly if not all in the form of legislation and statements of policies.

Cambodia is consistently ranked among the top ten countries most vulnerable to climate change and among the three most vulnerable in Asia. This is due in large part to a relatively low adaptive capacity. Efforts made in recent years have allowed Cambodia to develop a comprehensive plan for the climate change response (Cambodia Climate Change Strategic Plan 2014-23), as well as the corresponding key sector plans. Key governmental and non-governmental institutions have also had the opportunity to manage their first climate change projects on a pilot basis.

a. The Cambodia Climate Change Strategic Plan 2014 – 2023 (CCCSP)

   The first comprehensive national policy document responding to the climate change issue that Cambodia could be facing. The CCCSP reflected the political will, the firm commitment and readiness for reducing climate change impacts on national development and contributing with the international community to global efforts for mitigating GHG emissions under the UNFCCC.

b. The Law on Forestry (2002)

   This legislation defines the framework for management, harvesting, use, development and conservation of the forests in the Kingdom of Cambodia. The objective of this legislation is to ensure the sustainable management of these forests for their social, economic and environmental benefits, including conservation of biological diversity and cultural heritage.

Myanmar

Although Myanmar only submitted its initial communication to UNFCCC in December 2012 there were already legislation promoting the adaptation to climate change, namely:

a. Forest Law Act (1992); and

b. Protected Area and Forest Policy Statement (1995).

Myanmar has also drawn up her latest action plan in the form of Myanmar Climate Change Strategy and Action Plan (MCCSA) 2016-2030.

There are six priority action areas under MCCSA, namely:

a. Integrating climate change into development policies and plans;

b. Establishing institutional arrangements to plan and implement responses to climate change;

c. Establishing financial mechanisms to mobilize and allocate resources for investment in climate smart initiatives;

d. Increasing access to technology;

e. Building awareness and capacity to respond to climate change; and

f. Promoting multi-stakeholder partnership to support investment in climate smart initiatives.

Brunei

The Sultanate of Brunei has a legislation to protect her forest, namely the Forest Act (Chapter 46).

Brunei is also developing or has developed a Nationally Appropriate Mitigation Action Plan but 'there is no policy document on adaptation[32].

Laos

Laos is the first ASEAN Member State to ratify the Paris Agreement[33].

32. Koh Kheng Liang and Lovleen Bhullar, 'Governance on adaptation to climate change in the ASEAN Region', International Environmental Law Research Centre – 1 Carbon and Climate Law Review (2011) pp. 82-90.

33. http://www.diplomatie.gouv.fr/en/french-foreign-policy/climate/events/article/climate-paris-agreement-ratification-by-laos-07-09-16 & http://climateanalytics.org/hot-topics/ratification-tracker.html.

Meanwhile, there are also legislation and policies declared to address climate change. They are as follows:

a. On Air Protection

   i. The Ministerial Decision No. 7858/MONRE on the Ozone Depleting Substances Management (2012) – decision that regulates import, export, transit, distribution, and utilization of Ozone Depleting Substances;

   ii. The Regulation No. 2358/STEA-PMO on Control of Imports, exports and Consumption of Ozone Depleting Substances (2004) – earlier regulation on Ozone Depleting Substances;

b. On Energy

   i. The Law on Electricity (1997) – establishing rules and regulations for the electricity industry, including government investment in hydropower and regulation of the import/export of energy resources;

   ii. The Law on Minerals (2011) – revises the original Law of Minerals and includes principles and regulatory measures for mineral mining operations, having respect for environmental sustainability;

   iii. The Decree No. 90/PM on Export of Mining Products (2008) – regulating the export of Mining Products;

   iv. The Regulation No. 1116/MEM on Sending Mining Samples for Testing (2010) – regulating the testing of mining samples with the goal of coordinating management of local and international testing;

   v. The Decision No. 0352/MEM on Import and Export Licensing Procedures of Minerals and Mineral Products (2012);

   vi. The Decision No. 0481/ME on selling and buying Mines [Ores] and Mining Products (2012); and

c. On Forests And Land Use

i. Land Law (2003) – framework legislation that provides for the management of various types of land, including forestry and agricultural land;

ii. Law on Urban Plans (1999) – determines principles, regulations and measures regarding the management, land use, construction and building of structures at national and local levels to ensure conformity with policies and laws, aimed at urban development to meet the direction of the national socioeconomic development plan;

iii. Forest Law (2007) – creating categories of forests (protection, production, and conservation) and promoting sustainable management, preservation, development, and utilization of forest resources;

iv. Regulation on the approval procedure for proposed Clean Development Mechanism (CDM) (2007) – regulatory document approving the Clean Development Mechanism as part of the REDD Programme on deforestation;

v. Council of Ministers Decree No. 117/CCM on the Management and Use of Forests and Forested Land (1989) – Early forest conservation Decree allowing for privatization of certain forested lands provided that owners "preserve, manage, maintain, rehabilitate forests".

The Challenges

There are numerous challenges in the evolution of common legal jurisprudence on climate change within the ASEAN family. Some have been briefly mentioned above such as the diverse legal and judicial systems. But this has not prevented any of the Member States from nurturing the evolution of its own legal jurisprudence as seen above.

Anyway, one observation that may be made after examining the approaches taken by each of the ASEAN Member States in addressing climate change is that while there have been many

declarations and joint statements made exalting cooperation among Member States there seems to be still the lingering absence of real collective response as a group.

In fact there were times when conflicts seemed imminent between Member States on the appropriate responses to adopt when confronted with environmental issues. Quite recently the Malaysian Minister of Natural Resources and Environment commented that Malaysia's effort to fight haze would become more difficult if "Indonesia does not fully enforce the ban on open burning in the country". He said that the Indonesian government is still allowing open burning in areas less than two hectares. His hope is that the "Indonesian authorities will review the law and if possible abolish it for the benefit of the regional countries"[34].

But it is not a case where Indonesia has not been doing anything to address the annual haze problem. She has implemented "The Sustainable Peatland Management" project which began in 2010 across five different pilot sites in the Archipelago after it was proposed by the Ministry of Agriculture and had its funding approved by the Indonesian Climate Change Trust Fund (ICCTF). Indeed, Indonesia and environmentalists are very concerned on "the impact of one of the world's most pressing environmental problems – Indonesia's ticking carbon time bomb"[35].

Now, in the event of any dispute between Member States on the appropriate response to be taken in addressing climate change or other environmental issues there is no institution to adjudicate amicably such dispute. As such perhaps the idea of an "ASEAN Judiciary" may be ripe for consideration. When that happens the opportunity for the evolution of uniform legal jurisprudence in the ASEAN region should be promising.

34. http://www.thestar.com.my/news/nation/2016/09/01/open-burning-ban-vital-to-fight-haze-says-wan-junaidi.

35. http://www.theborneopost.com/2013/10/02/how-an-indonesian-peatland-project-is-offering-a-new-way-to-curb-forest-fires/.

The "ASEAN Way", premised on consensual decision-making based on the principles of sovereignty and non-intervention, has also to a certain extent restricted ASEAN in implementing measures at the national level. And a *fortiori* a judiciary of one Member State could not be expected to have any jurisdiction in another Member State. Such problem has been anticipated by Singapore when enacting the Trans-Boundary Haze Pollution Act 2014[36].

Indeed the ASEAN Way allows each Member State to act or declare a policy or change of policy on climate change that might be in contradistinction to the stand of the other Member States.[37] It should also be appreciated that all the Member States of ASEAN with the exception of Singapore are still developing. Economic growth is needed to provide job opportunities for their population. But of course it would be preferable if economic growth could be tailored in an environmentally sustainable form.

On an individual basis, for ASEAN Member States there are also challenges in the development of legal jurisprudence on climate change. One challenge is on the issue of *locus standi*. Some have adopted a restrictive approach while some have taken a liberal approach. For instance, Malaysia is still quite on the former[38] while the Philippines and Thailand are on the latter[39].

36. Alan Khee-Jin Tan, 'The "Haze" Crisis in Southeast Asia: Assessing Singapore's Trans-boundary Haze Pollution Act 2014'.
37. https://www.theguardian.com/environment/2016/jul/19/philippines-wont-honour-un-paris-climate-deal-president-duterte.
38. *Ketua Pengarah Jabatan Alam Sekitar & Anor v. Kajing Tubek & Ors & Other Appeals* – Note 24.
39. *Resident Marine Mammals of the Protected Seascape Tanon Strait, et al. v. Secretary Angelo Reyes, et al.,* G.R. No. 180771, 24 April 2012; Rules of Procedure for Environmental Cases in the Philippines; Judge Pairoj Minden, president, Chamber of the Central Administrative Court, and spokesperson, Thailand Administrative Court – 2nd Chief Justices' Roundtable on Environment.

Environmental law is also still quite foreign to many judges and legal practitioners in the ASEAN region. Not all Law Schools in the region have made Environmental law a compulsory subject. As a result the creation of pools of lawyers conversant in environmental laws has been impeded. And, added by the lack of interest or awareness among ordinary people, it is not surprising that there is hardly any public interest litigation on climate change or related to it filed in courts. This has deprived the courts an opportunity to develop robust legal jurisprudence on climate change.

There is also a need for a shift in mind-set by both the governing authorities and the governed in addressing climate change.

Presently, too much reliance has been placed on the governing authorities to decide on climate change without the participation and contribution from those who are in fact affected or would be affected by its impacts. Such reliance has created a situation in which laws intended to address climate change are legislated leaving the courts merely to interpret them. As stated above, some judges might adopt a plain and literal interpretation of a piece of legislation thereby defeating the very purpose in enacting the law and at the same time stifled constructive judicial activism.

Conclusion

Upon a quick perusal on the development of environmental jurisprudence in the ASEAN region for the last decade, it can be safely said that it is evolving albeit at a slower pace when compared with that of the developed countries. But the important point is that it is evolving including that related to climate change.

Hazy Days Ahead: Legal Rights Under International And Domestic Laws

by

*Tan Sri Azahar bin Mohamed**

Haze is pollution of the atmosphere, which is clogged with harmful particles, such as vapour, dust, smoke and other matters like high concentrations of oxides of sulphur, nitrogen and carbon, suspended in the air, which impairs visibility. Haze pollution causes significant disruptions to businesses and livelihoods. As a nation, we suffer economic losses as schools and workplaces are forced to close, flights are cancelled and tourism activities dropped. It disrupts daily lives and affects human health adversely such as irritations of the respiratory tract and the eyes. Long exposure to pollutants in the haze can cause serious long-term damage to the health. Only too often, hospitals and clinics report an increase in respiratory problems, lung infections and asthma attacks each time haze appears.

The challenge is that resolving the haze problem is particularly beyond our jurisdiction. Malaysia and other ASEAN countries have raised concerns over the hazards of the yearly "migration" of haze from Indonesia to its neighbouring countries. It is a complex issue. We have had to deal with this problem for the last twenty years. The severity of the haze differs from year to year but each time it appears, our stress levels go up.

Pollution from haze is transboundary and respects no national borders. Dealing with transboundary pollution is a major challenge where the principle of international law is based on

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Westphalia sovereignty, which gives each nation sovereignty over its territory and domestic affairs. Countries are sovereign entities and cannot be dictated by others.

While seasonal and illegal slash-and-burn clearing of forests and peatlands by corporate entities as well as small-scale farmers in Indonesia are the main cause of transboundary haze pollution, Malaysians conducting open burning worsen the haze. Indeed, haze is also our own doing. We must not overlook that there has been an increase in cases of open burning and forest fires in Malaysia, which aggravates the haze pollution. For example, in August 2016, it was reported that several parts of the Klang Valley had been hit by haze that was caused by peat fires within our borders rather than from Indonesia.

Furthermore, increased population and rapid economic growth have also seen an increase of air pollutants from man-made sources like motor vehicles, electrical utilities and industrial fuel burnings, and manufacturing and agricultural operations. These are also key sources of air pollution domestically.

It is now appropriate that I briefly discuss the various options that are available to private citizens and the government in seeking remedies against the domestic wrongdoers. The recourse generally taken can broadly be identified as criminal and civil actions.

In respect of criminal law, it falls within the ambit of State prerogative. Only the Public Prosecutor on behalf of the State can undertake a criminal action against the domestic wrongdoers for statute-based offences. There are indeed limited provisions in the legislation that deal directly with haze. For example, as open burning has been one of the contributing factors to haze problem, section 29A of the Environmental Quality Act 1974 (the EQA) prohibits open burning on any land, which is defined as any fire, combustion or smouldering that occurs in the open air and which is not directed there through chimney or stack. Any person who contravenes this provision shall on conviction be liable to a fine not exceeding RM500,000.00 or to imprisonment

for a term not exceeding five years or to both. It is interesting to note that if open burning occurs on any land, the owner or the occupier of the land who has control over the land shall be deemed to have contravened the provision unless the contrary is proven.

Several Regulations had also been passed to make provisions for air emission related offences, such as control of motor vehicle emissions, operating without air pollution control equipment, installing fuel burning equipment and chimney without approval, and smoke emission exceeding the stipulated standards.

It is pertinent to note that the Malaysian Judiciary has stepped up its effort in the field of environmental law, which also deals with issues pertaining to haze, with the issuance of the Practice Direction No. 3 of 2012 dated 27 August 2012, entitled "The Establishment of Environmental Courts", following which environmental cases are now assigned to the designated court as identified in the Practice Direction[1]. By this Practice Direction, the Chief Justice has directed the establishment of the Environmental Courts that became operational from 3 September 2012.

The establishment of the Environmental Courts is aimed at improving the administration of criminal justice of cases relating to environmental issues at both the Sessions Court and the Magistrate's Court. With these specialised courts, environmental cases can be monitored and resolved in a more efficient manner. The nature of cases handled by Environmental Courts includes pollution of air, open burning and air emission related offences.

There are six main objectives for the establishment of the Environmental Courts of Malaysia, namely,:-

(1) to expand and improve access to environmental justice;

(2) to provide an expeditious disposal of environment-related cases;

1. See 'Shifting The Judges Paradigm On Environmental Justice', *The Malaysian Judiciary Yearbook 2012*, p 126.

(3) to harness expertise relevant to the specialised field;

(4) to monitor environmental cases closely and to ensure that environmental cases are not taken lightly;

(5) to ensure uniformity of decision-making in environmental cases; and

(6) to increase public participation and confidence.

For the purpose of coordination, the Chief Justice further directed, among others, that the following be adhered to:

(1) all Sessions Courts and Magistrate's Courts shall give priority to environmental cases by fixing a regular schedule to hear these cases, and this includes the circuit courts sitting as a Magistrate's Environmental Court;

(2) at least thirty-eight Acts of Parliament and seventeen sets of regulations relating to environmental offences have been identified as legislation under the jurisdiction of the Environmental Courts;

(3) environmental cases shall be heard and disposed of within six months from the date the accused person is charged in court. For Environmental Courts in Sabah and Sarawak, environmental cases shall be heard and disposed of within three months and six months respectively; and

(4) appeals of environmental cases from the lower court to the High Court shall be registered under special codes.

The establishment of Environmental Courts is a step in the right direction to achieve effective environmental adjudication and to further enhance and improve environment quality as well as to uphold environmental sustainability.

As regards civil action, the law of torts plays a significant role as it is the means by which private citizens and the State authorities may seek recourse against domestic wrongdoers for any injuries suffered as a result of the haze.

A private citizen may feel the discomfort caused by fumes or smokes from a neighbour who burns his rubbish. In this regard, the tort of private nuisance pertains to a substantial and unreasonable interference with one's enjoyment of land. The very essence of private nuisance is the unreasonable use by a man of his land to the detriment of his neighbour [2]. The nuisance relates to something emanating from the defendant's land. It is not always easy to assess the liability in a nuisance, as it requires the ability to strike a balance between the reasonableness of the tortfeasor's action and the plaintiff's rights over his or her property [3].

Public nuisance, on the other hand, has been described as a nuisance, which, within its sphere, materially affects a class of subjects of the State. It differs from private nuisance in that it affects the rights common to all subjects whereas in private nuisance it only affects an individual.

The law of negligence is a fault-based system where in order to succeed in negligence, there has to be some fault on behalf of the defendant. Under the law of negligence, it is necessary to foresee the type of harm, which results from an activity. Tort of negligence arose from a failure to exercise the care demanded by the circumstances with the result that the plaintiff suffers an injury. The plaintiff needs to show that he is owed a duty of care and that the defendant has breached that duty resulting in damage to him. The duty of care is owed to persons so closely and directly affected by the defendant's act that he ought reasonably to have them in contemplation as being so affected when directing his mind to the acts or omissions which are called in question[4].

2. See *Miller v. Jackson* [1977] 3 All ER 348.
3. See *Woon Tan Kan & 7 Ors v. Asian Rare Earth Sdn. Bhd.* [1992] 4 CLJ 2299.
4. Per Lord Atkin in *Donoghue v. Stevenson* [1932] AC 562.

Rylands v. Fletcher[5] is a particular tort, which was propounded in the case of the same name in 1865. It created a liability upon the defendant though there may be no proof of his negligence. In that case, the defendant had a reservoir constructed on his land. When the water was filled into the reservoir, a mine belonging to the plaintiff was flooded because the contractors failed to block off the mineshafts. The House of Lords found that the defendant was liable though there was no negligence on his part.

As regards environmental civil liability, by Practice Direction dated 14 December 2015, specialised Environmental Courts for civil cases, both in the High Court and the Subordinate Courts were established to expedite the disposal of environmental civil cases.

Now, I want to say a little about public law litigation in the High Court, which typically involves the constitutionality of legislation and the validity of governments' or public authorities' actions or omissions. In this regard, the Malaysian Judiciary, like their common law jurisdiction counter-parts, developed a system of judicial control to check on the validity of actions of the government through a judicial review jurisdiction.

Judicial power is vested in the hands of the Judiciary and it is this judicial power that enables the Judiciary to ensure, in the exercise of its supervisory jurisdiction, that the Executive acts in accordance with law. Central to this development is the judicial control of administrative or ministerial actions that the courts exercise through judicial review. As stated by Raja Azlan Shah CJ (as His Highness then was) in *Pengarah Tanah dan Galian, Wilayah Persekutuan v. Sri Lempah Enterprise Sdn Bhd*[6]:

> The courts are the only defence of the liberty of the subject against departmental aggression. In these days when government departments and public authorities have such great powers and influence, this is a most important safeguard for the ordinary

5. [1868] LR 3 HL 330.

6. [1979] 1 MLJ 135; [1978] 1 LNS 143.

> citizen: so that the courts can see that these great powers and influence are exercised in accordance with law. I would once again emphasise what has often been said before that public bodies must be compelled to observe the law and it is essential that bureaucracy should be kept in its place.

The basis for judicial review of acts and decisions of public authorities has been the doctrine of *ultra vires* or excess of jurisdiction. The role of the court is to keep public authorities within their allocated authority or jurisdiction. In judicial review, the court is concerned with the decision-making process and not with the merits of the decision.

Therefore, in the field of environmental protection, which includes haze issues, where the decisions of public authorities have caused adverse impact on the environment, judicial review of the decisions of public authorities becomes an important court proceeding to members of the public in seeking redress and appropriate remedies.

The statutory basis of judicial review actions in Malaysia is provided by section 25(2) of the Courts of Judicature Act 1964. The effectiveness of judicial review lies in the powers of the court to issue prerogative writs including an order of *mandamus*, *certiorari*, injunction and declaration against the government. However, the courts have imposed restrictions on persons who may be allowed to proceed in their actions against public authorities. In public law litigations, the initial issue to be determined is whether the litigant has a standing to sue or *"locus standi"*.

The purpose of standing is to ensure that only those who have legitimate interests in a matter are allowed access to court. The rationale for imposing the restrictions has been explained in the case of *R v. IRC, Ex parte National Federation of Self-Employed and Small Business Ltd*[7] where Lord Diplock expressed the importance of rules of *locus standi* to prevent the time of the

7. [1982] AC 617.

court being wasted by busybodies with misguided or trivial complaints of administrative errors, and to remove the uncertainties in which public officers and authorities might be left as to whether they could safely proceed with administrative action while proceedings for judicial review of it were actually pending even though misconceived.

The rules of *locus standi* have a gate-keeping function that will enable the exclusion of vexatious litigants and unworthy cases. The standing rule assists the court to filter applications to prevent unnecessary litigation against public authorities. The recent Federal Court case of *Malaysian Trade Union Congress & Ors v. Menteri Tenaga, Air dan Komunikasi & Anor*[8] represents the law on locus standi as we apply today. The Federal Court held that in respect of judicial review proceedings the "adversely affected test" was to be preferred. In order for an applicant to pass the "adversely affected test", the applicant had to show he had a real and genuine interest in the subject matter, which was different from the "sufficient interest test".

So far, I have in brief examined the various options available to private citizens and the government against domestic wrongdoers, which cause or contribute to haze pollution. I have also briefly discussed the judicial review jurisdiction of the High Court.

Coming back to the transboundary haze pollution caused mainly by the land clearing and "slash-and-burn" agriculture practices in Indonesia, the central question which we must then ask here is: what options are available in seeking remedies against the wrongdoers? To answer this question, it is important to keep in mind the basic general principles of international law.

The first principle of international law is that a State has the sovereign right to exploit its natural resources, including its forests. It reaffirms the sovereign rights of a State to conduct activities in its territory. This right is, however, not unlimited. It

8. [2014] 3 MLJ 145; [2014] 2 CLJ 525.

is limited by the second principle, which is that a State has the responsibility to ensure that activities within its jurisdiction or control do not cause damage to the environment of other States or to areas beyond the limits of its national jurisdiction. In other words, the State has no right to conduct activities that will cause injury to other States.

The question then arises whether it is permissible for a country to enact law that would have extraterritorial reach? First, I would like to draw your attention to the Transboundary Haze Pollution Act 2014 (the 2014 Act) enacted by Singapore, which came into force on 25 September 2014. It is a piece of legislation which expressly provides that it shall extend to and in relation to any conduct outside Singapore which causes or contributes to any haze pollution in Singapore. It therefore covers conduct which contributes to haze pollution in Singapore, whether or not such conduct occurs within or outside Singapore.

It was reported in the media last year that our own Natural Resources and Environment Ministry is working on legislation similar to the 2014 Act, to enable legal actions against individuals and companies operating in Indonesia and elsewhere that employ the slash-and-burn land clearing method.

I move on now to briefly look at the key provisions of the 2014 Act. It empowers the Singaporean authorities to go after companies behind the haze in Singapore, even if they do not operate in Singapore or are not registered as a company in Singapore. Any entity is guilty of an offence under the 2014 Act if it engages in conduct or condones any conduct, which causes or contributes to haze pollution in Singapore. An entity is also liable if it participates in the management of an offending company.

To balance the liability of these entities, the alleged conduct must coincide with the occurrence of haze pollution in Singapore at or about that time. The 2014 Act also provides certain defences which may be relied on, for instance, by showing that the haze

was caused by other factors, or that the alleged conduct was by another entity without the consent of the alleged offender, or that reasonable measures had been taken to prevent such conduct or reduce the detriment to the environment.

According to section 5 of the 2014 Act, the Singaporean courts can impose a fine of S$100,000.00 for each day a local or foreign firm contributes to unhealthy levels of haze pollution in Singapore, subject to a maximum fine of S$2 million. Apart from criminal liability, the 2014 Act also creates statutory duties and civil liabilities. The 2014 Act makes it possible for individuals to file civil actions against errant companies. It provides that an offending entity may be liable for personal injury, disease, incapacity or death that results from its breach of duty. The entity may also be liable for any damage to property or economic loss. The 2014 Act provides that the Singaporean courts shall have jurisdiction over such a claim whether or not such a claim is actionable elsewhere.

There were mixed responses to this extraterritorial law. Some parties in the ASEAN region expressed support for Singapore's transboundary haze law. Others criticised the law on the grounds that it was a violation of a State's sovereignty. There are views that imposing extraterritorial law to punish entities responsible for haze-causing fires in Indonesia could backfire as it might undermine efforts to hold Indonesia accountable for the annual issue. Pinpointing the source of transboundary to specific individuals and companies for prosecution is not easy. Any law created to deal with the haze would only work if Indonesian authorities cooperate and identify the wrongdoers. It is said that the 2014 Act is difficult, if not impossible, to enforce.

It is true that the basic and fundamental principle in international law is that a country exercises its jurisdiction on a territorial basis. Essentially, a country exercises its jurisdiction over persons, properties and acts within its territory. Still, there are established exceptions to this general principle. You will

remember the Trail Smelter Arbitration (the 1941 Trail Smelter)[9]. The award of the Arbitral Tribunal in that case supports the view that general principles of international law impose obligations on States to prevent transboundary air pollution. The 1941 Trail Smelter dispute involved a smelter in Canada where smoke from the smelter spread across the border causing air pollution in the United States. In this case, an International Tribunal held Canada to be responsible for the environmental damage and it must pay the damages and a regime was prescribed to control future emissions from the Canadian smelter which had caused the air pollution damage. This is the fundamental principle of international environmental law: activities conducted in a State should not cause transboundary harm. The Tribunal noted "under principles of international law, as well as the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another".

From this international law perspective, it appears that the 2014 Act is consistent with international law. The point I want to make is that there is a clear rule in international law that acts committed in one country that cause environmental harm to the territory of another country constitute a legal wrong. It is, therefore, consistent with international law for Malaysia to hold accountable individuals and companies that have caused fires elsewhere which have, in turn, caused haze pollution in Malaysia.

It has to be highlighted at this point that Malaysia has adopted a multi-faceted approach to the transboundary haze pollution *via* regional and bilateral cooperation. It is at this juncture that I turn next to touch on the ASEAN Agreement on Transboundary Haze Pollution (the Agreement), which was signed by all ten ASEAN Member States in June 2002.

9. Arbitral Tribunal 3 UN Rep. International Arbitration Award 1905 (1949); 3 RIAA (1941) 1905.

This is a historic regional arrangement binding the ten ASEAN member countries to address and tackle transboundary haze pollution resulting from land and forests fires. The Agreement requires the Parties to the Agreement to do two things:

(1) cooperate in developing and implementing measures to prevent and monitor transboundary haze pollution by controlling sources of fires, development of early warning systems, exchange of information and technology; and

(2) respond promptly to a request for relevant information sought by States that are affected by such transboundary haze pollution.

In my view, the Agreement has a limited effect in solving the haze problem. There appears to be no explicit provision in the Agreement pertaining to enforcement measures. It does not provide provisions to allow Member States to claim damages or compensation from the offending State. It does not provide sanctions for non-compliance of its terms. The Agreement does not contain dispute settlement mechanisms. The Agreement does not establish a regional court to deal with non-compliance of the obligations placed on individual States. It takes political will on the part of the country where forests and peatlands are burning to tackle the smoke haze problem through the Agreement. The Agreement is said to be hampered by the block's philosophy of non-interference in the domestic affairs of its members.

The Judiciary plays a key role in strengthening environmental rule of law. The Asian Development Bank (ADB) has taken the initiative to organise the ASEAN Chief Justices Roundtable on Environment. The 1st ASEAN Chief Justices Roundtable on Environment, which was held in Jakarta, Indonesia from 5 to 7 December 2011, brought together Chief Justices and their designees from the highest courts of ASEAN. The Jakarta Common Vision on Environment for ASEAN Judiciaries (the 'Jakarta Vision'), which was agreed to at the 1st ASEAN Chief Justices Roundtable, has outlined three objectives of the Roundtable. Firstly, to share information among ASEAN Chief

Justices and the senior Judiciary on ASEAN's common environmental challenges. Secondly, to highlight the critical role of ASEAN Chief Justices and the senior Judiciary as leaders in national legal communities and champions of the rule of law and environmental justice, with the ability to develop environmental jurisprudence and to generate knowledge and action on ASEAN's environmental challenges among the judiciary, the legal profession and law students. Thirdly, to develop a process for continuing the cooperation and engagement of ASEAN's senior Judiciary on environmental issues.

This year will be the 6th year of the Roundtable hosted by the Supreme Court of ASEAN Member States. Malaysia is proud to have hosted the 2nd Roundtable in Melaka in 2012. In every Roundtable, different environmental issues and challenges were discussed including climate change, deforestation and illegal logging, biodiversity and illegal wildlife trade, ocean destruction, illegal fishing, marine pollution, planning and environmental impact assessment, freshwater pollution, flood, urbanisation and air pollution as well as challenges to the Judiciary in particular. Transboundary issues such as haze has been one of the key issues discussed in the recent Roundtable held in Siem Reap, Cambodia. The ASEAN Judiciaries collectively agreed that the Judiciary of the Member States plays an important role in resolving the haze pollution by imposing a more stringent penalties[10].

In closing, I would like to say that government-to-government cooperation will be the way forward for our country and Indonesia in solving the current transboundary haze problem. The government must cooperate with the Indonesian authorities to stamp out forest fires. The wrongdoers must be brought to justice. Constant vigilance will ensure the perpetrators do not repeat the offences. The way to prevent and monitor pollution is through concerted national efforts and regional and

10. See the opening address by the Right Hon Tun Arifin Zakaria, Chief Justice of Malaysia at the International Law Conference 2016.

international cooperation. A study to assess the economic, health and social impacts of the haze in the ASEAN region is also much needed. This will pave the way for countries in the region to collectively take action to combat the transboundary haze pollution. Sustainable and long-term efforts are critical to address the challenges of the haze.

Close cooperation between Malaysia and its neighbouring countries is unquestionably imperative to deal with the haze. No country could afford to deal with the problem by working in isolation as the haze is very much a regional problem. No country can address it effectively without the spirit of working together.

Introduction To Key Principles Of Islamic Environmental Issues

by

Dato' Setia Mohd Zawawi Salleh[*]

Introduction

In this article, I will briefly explain some aspects of the Islamic key principles on environmental ethics in the light of Quranic verses and *hadith*. This article consists of five sections –

Section I	:	Concept of unity (*tawhid*) in Islam;
Section II	:	The relationship between man and environment;
Section III	:	Governing rules in Islamic environmental ethics;
Section IV	:	Islamic environmental ethics concerning water, earth, plants, animals and land conservation (*hima*); and
Section V	:	Concluding remarks.

At the outset, perhaps it would be useful to define the words "environment" and "ethics". "Environment" refers to the complex of physical, chemical and biological factors affecting human and non-human beings. Within the ambit of environment, a host of ecosystems are functioning in which particular groupings of life forms interact with environmental segments[1]. The word "ethic" comes from the Greek word "ethos", meaning "habit" or "custom". Ethics means "rules of

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1. Swarup, R., S.N. Mishra and U.P Jauhar, *Encyclopaedia of Ecology, Environment and Pollution Control* (New Delhi: Mittal Publication, 1992) 360.

behaviour in accordance with a system of value"[2]. Yang, a noted environmentalist, says, "environmental ethics deals with ethical problems surrounding environmental protection and it aims to provide ethical justification and moral motivation for the issue of global environmental protection"[3]. According to Bourdeau[4], environmental ethics is that part of applied ethics which examines the moral basis of our responsibility towards the environment.

The ethical basis of Islam is derived from the imperatives laid down in the Quran and expressed in the practices of Prophet Muhammad (PBUH). The key ethical basis of Islam is to do what is right, forbid what is wrong and act with moderation at all times.

Section I: Concept Of Unity (*tawhid*) In Islam

Indeed, every discussion of ethics in Islam must, of necessity, proceed from *tawhid*. In Islam, ethics is inseparable from religion and is built entirely upon it. *Tawhid* is the *sine qua non* and foundation of the Islamic faith. It implies that the whole universe is created, controlled and sustained by One Supreme Being:

> To God belong all things in the heavens and on earth. (Quran: 4:126)
>
> There is no god but He, the Creator of all things. (Quran: 6:102)

The principle of *tawhid* provides a Muslim with a unitary vision. With the help of this vision, he can see that man and ecosystem are parts of the same universe and are regulated by the divine

2. Al-Damkhi, A.M., 'Environmental Ethics in Islam: Principles, Violations and Future Perspective' [2008] 65(1) International Journal of Environmental Studies 11-31; http:11dx.doi. org/ 10.1080/00207230701859724.
3. Yang, T., 'Towards on Egalitarian Global Environmental Ethics' in *Environmental Ethics and International Policy* (Paris: UNESCO, 2006); http://publishing unesco.org/chapter/978-2-3-104039-0.
4. Bourdeau, P., 'The Man-Nature Relationship and Environmental Ethics' [2004] 72 Journal of Environmental Radio Activity 9-15.

law. Goolam[5] commented that "the idea that Allah SWT is the True Owner and Manager of His Resources liberates the human mind the false sense of autonomy or domain on the Earth's natural resources". This is the bedrock of the holistic approach in Islam as this affirms the interconnection of natural orders.

Therefore, when one understands the fact that Allah SWT has created the environment and all that is in it, one will need to stop for a second before intending any "harm" to the environment. "Harm" may be simply understood as a disruption of the created balance. This includes leaving a plastic bag on the side of the road or in the water, releasing dangerous chemicals in the well balanced air that people breathe or not washing one's hand after relieving oneself and therefore introducing illness to the healthy or created body which belongs to the Creator. One then should reflect on this when he intends harm to Allah SWT's created environment.

Not only is the environment a creation of Allah SWT, it is also the Loci of the Signs (*ayat:* singular *ayah*) pointing to Him. In one such comprehensive verse, Allah SWT states:

> Behold! In the creation of the heavens and the earth; in the alternation of the night and the day; in the sailing of the ships through the ocean for the profit of mankind; in the rain which God sends down from the skies, and the life which He gives therewith to an earth that is dead; in the beasts of all kinds that He scatters through the earth; in the change of the winds, and the clouds which they trail like their slaves between the sky and the earth;- (here) indeed are Signs for a people that are wise. (Quran: 2:164)

5. Goolam, Hafiz Nazeem. 2003, 'Seventh World Wilderness Congress Symposium: Science and Stewardship to Protect and Sustain Wilderness Values', November 2-8, 2001: Preserving Paradise Through Religious Values of Nature: The Islamic Approach, 1656-166. Port Elizabeth, South Africa: U.S. Department of Agriculture, Forest Service" (cited 26 June 2009); http://www.fs.fed.us/rm/pubs/rmrs_p027/rmrs_p027_165_166.pdf.

Allah SWT has created the Signs for human beings to think, to meditate, to reflect and to ponder as mentioned in the Quran (16: 11, 12, 13, 67, 69). Muslim modernists such as Jamaluddin Afghani (d. 1897) in Turkey, Iran and Egypt, Sir Sayyid Ahmad Khan (d. 1898) in India, Muhammad Abduh (d. 1905) in Egypt and Sayid Syekh al-Hadi (d.1934) in Malaysia explained to Muslims that Allah SWT has given them two clear holy books: they are the works and words of Allah SWT. The works of Allah SWT are found in the universe and its natural and universal laws. The words of Allah SWT are found in the Quran. Both the universe and the Quran point to the existence of Allah SWT since the universe is the Sign of Allah SWT in the physical form and the Quran in the word form. According to these Muslim modernists, both the universe and the Quran do not contradict and they indicate the existence of Allah SWT Who is alive, omniscient, omnipotent, just, one, eternal and so on. These Muslim modernists demanded Muslims to study and understand both the universe and the Quran if they wish to overcome their backwardness and weaknesses since the universe contains the physical and biological laws while the Quran contains the religious, moral and social laws. Both kinds of laws are created by Allah SWT for human beings[6].

The concept of the environment as the work and Sign of Allah SWT is found in the Quran in many chapters and verses. For example, the Quran refers to the stars which decorate the sky (50: 6-8), the majestic mountains which stabilise the earth (31: 10-11), the sun and the moon and their movements on their well-defined courses (36: 38-40), the fecundating role of winds (15: 22), the plants that produce fruits and grains each with a different taste (13: 4, 36: 33-35), the cattle out of whose bellies come healthy milk from between excretions and blood (16: 66) and the bees and their production of honey in which there is healing for human

6. Ibrahim Abu Bakar, *Islamic Modernism in Malaya: The Life and Thought of Sayid Syeikh Al-Hadi 1867 – 1934* (Kuala Lumpur: University of Malaya Press, 1994) 40-42.

beings (16: 68-69). The Quran (16: 4-8) explains that Allah SWT has created man from a sperm-drop and that Allah SWT has created cattle for human beings to derive warmth and numerous benefits from the cattle including to eat their meat and to have a sense of pride and beauty in them when human beings lead them forth to pasture in the morning and when human beings drive them home in the evening, and the cattle to carry human beings' heavy loads to lands that human beings could not reach except with distressed souls. Allah SWT also created horses, mules and donkeys for human beings to ride and use and He created other things too of which human beings have no knowledge.

The Quran (16:10-11) clearly indicates that Allah SWT sends down rain from the sky for human beings to drink the water and the rain grows vegetation for human beings to feed their cattle, and Allah SWT produces for human beings corn, olives, dates, grapes and every kind of fruit as His Signs for human beings to think about them. Allah SWT created the night and the day, the sun and the moon and the stars which are subject to His command as the Signs for human beings to think about them (Quran: 16:12). The people or men of understanding, the *ulu al-bab* in Arabic, are people who reflect on the universe and remember Allah SWT in their standing, sitting and reclining (Quran: 3:190-191).

Allah SWT has created the night and the day to follow each other for anyone who wishes to remember Allah SWT and to show his gratitude to Him (25:62): "The scenes of the phenomenal world are Signs of Self-Revelation of Allah, for those who understand and who have the will to merge their wills with His. This they do (1) by praising Him, which means understanding something of His nature, and (2) by gratitude to Him, which means carrying out His Will, and doing good to their fellow creatures."[7]

7. 'Abdullah Yusuf Ali', *The Holy Quran, Arabic Text with English Translation of the Meaning & Selected Commentaries* (Saba Islamic Media Sdn. Bhd., 2009).

Muslim theologians and philosophers have used the universe in their efforts to prove the existence of Allah SWT and their proofs are known as the cosmological proofs or arguments. "The Quran employs the perfect order of the universe as the proof not only of God's existence, but also of His unity, which is known as the 'cosmological evidence of God's existence' in the philosophy of Islamic theology (kalam)."[8] According to Ozdemir[9], "A careful examination of the early verses of the Quran reveals an invitation to examine and investigate the heavens and the earth, and everything that can be seen in the environment: birds, sheep, clouds, seas, grapes, dates, olives, flies, the moon, the sun, fish, camels, bees, mountains, rain, wind — in short all natural phenomena." This concept of the universe as the work and Sign of Allah SWT can guide human beings, especially Muslims, to preserve the universe as it is as far as they can in order to maintain the universe as the Sign of Allah SWT. If they destroy the universe, they directly or indirectly destroy the Signs of Allah SWT.

The environment was created readily balanced and it is the best measure specified by Allah SWT. The harmonious balance in the ecosystem cycle has been intelligently and perfectly created by Allah SWT:

> Verily, all things have We created in proportion and measure. (Quran: 54: 49)
>
> And the Firmament has He raised high, and He has set up the Balance (of Justice). In order that you may not transgress (due) balance. So establish weight with justice and fall not short in the balance. (Quran: 55:7-9)

8. Ibrahim Ozdemir, *Towards An Understanding of Environmental Ethics from a Qur'anic Perspective* in Richard C. Foltz, Frederick M. Denny and Azizan Baharuddin (eds.), *Islam and Ecology: A Bestowed Trust* (Centre for the Study of World Religions, Cambridge, 2003) 7.
9. *Supra.*

The above verses *(ayat)* make a general statement about the existence of equilibrium in everything. Anything lacking or excessive in the ecosystem cycle may lead to continuous harm and will spread to other entities in the cycle. For example, the cutting down of green trees, that provide oxygen and consume carbon dioxide in the natural cycle way, will kill entities such as human beings and animals.

The environment is not only a creation sustained by Allah SWT which serves as a Sign of Allah SWT Himself, it is also a complete submission and worship of Allah SWT. Allah SWT says in the Quran:

> Do you not see that to God prostrate all things that are in the heavens and on earth, - the sun, the moon, the stars, the hills, the trees, the animals; and a great number among mankind? But a great number are (also) such as unto whom the Punishment is justly due: and such as God shall disgrace, - none can raise to honour: for God carries out all that He wills. (Quran: 22:18)

This verse points out several issues. The first is that although everything is in worship of Allah SWT, we do not understand the nature of that worship. However, this worship is not limited to the animate environment and therefore includes the air, water, mountains and all beings in a state of constant worship in their own way. Allah SWT says, speaking about Prophet David (PBUH),:

> It was We that made the hills declare, in unison with him, Our Praises, at eventide and at the break of day. (Quran: 38:18)

Worship means submission and obedience to the Will of Allah SWT. The environment whether it be a microorganism, tree or stone is doing exactly what it was created for without the chance or option of disobedience and lack of submission. The environment is, therefore, in a constant state of worship of Allah SWT both "*Taskheeran*" and "*Tasbeehan*" (following the order it

was created for and constantly glorifying Allah SWT). Although the environment is in a complete state of worship to Allah SWT, human beings are not always in worship. Allah SWT clarifies this in verse 22:18, when He talks about mankind, where He mentions that "a great number" and not all are in worship.

Section II : The Relationship Between Man And Environment

In Islam, Allah SWT created human beings as vicegerents (*khalifah*) on the earth, and not as the lords of nature and the world. The Arabic term "*khalifah"* comes from the verbal root *khalafa*, meaning one who comes after, inherits or succeeds another. *Khalifah* thus implies holding a position of power, trust and responsibility that is exercised in harmony with the will of its principal party. *Khalifah* and its plural *khala'if* occur in nine places in the Quran where seven of them are juxtaposed by the word *fi'l-ard* (on the earth) which signifies that their applications are mainly in relation to planet earth:

> It is He Who has made you the inheritors of the earth. (Quran: 6:165)

Vicegerency confers on human beings, individually and collectively, the mission and responsibility to build the earth and harness its resources with moderation and care for its ecological balance. Vicegerency is guided in turn by the principles of trusteeship (*amanah*), moderation (*i'tidal*, *wasatiyyah*) and justice (*'adl*).

Vicegerency and trusteeship place upon humankind the responsibility to safeguard the rights not only of his fellow human beings but also of nature and other inhabitants of the earth. In the same way that God sustains and cares for the environment, man must nurture and care for the ambience in which he plays the central role. Man cannot neglect the care of the environment by betraying its trust of vicegerency as he is entrusted with the authority to manage the earth in accordance with the purposes intended by its Creator.

This means that while human beings may use the resources of the world, they do not have a right to exploit or destroy these resources that belong to God and have been given to them in trust. The utilisation of the world's resources should be in keeping with the nurturing and sustaining responsibilities of the role as *khalifah*.

The Quran and the *sunnah* make *amanah* an integral part of the faith of a Muslim. *Amanah* is a hall mark of faithful Muslims. A breach of *amanah* is a grave matter as in the *hadith*:

> One who betrays his amanah has no faith. (Narrated by Anas b Malik)

It is a religio-ethical mission of human beings on the earth to act conscientiously in their capacity as God's vicegerents and custodians. The following *hadith* juxtaposes trusteeship with moral autonomy:

> Beware that every one of you is a custodian and responsible for that which is in his custody. A leader is a custodian and he is responsible for his subjects; a man is a custodian and he is responsible for his family; a woman is the custodian of her husband's home and children and she is responsible for them. Surely each one of you is a custodian and responsible for his charge. (Narrated by Sahih Al-Bukhari)

Allah SWT has made it clear in the Quran that corruption on the earth, which would include all types of interaction in a way other than the beautiful and perfect way dictated by Allah SWT, is not beloved to Him. As a believer in Allah SWT, one should want nothing more than to do what Allah SWT loves and therefore gain His pleasure in this life and the next. Allah SWT says, speaking of human's corruption on the earth:

> When he turns his back, his aim everywhere is to spread mischief through the earth and destroy crops and progeny. But God loves not mischief. (Quran: 2:205)

> Mischief has appeared on land and sea because of (the evil) that the hands of men have earned, that (God) may give them a taste of some of their deeds: in order that they may turn back (from Evil). (Quran: 30:41)
>
> But seek, with the (wealth) which God has bestowed on you, the Home of the Hereafter, nor forget your portion in this world: but do your good, as God has been good to you, and seek not (occasions for) mischief in the land: for God loves not those who do mischief. (Quran: 28:77)
>
> Do no mischief on the earth, after it has been set in order, but call on Him with fear and longing (in your hearts): for the Mercy of God is (always) near to those who do good. (Quran: 7:56)

Muslims believe that all actions are rewarded and punished and as such there are almost no incidents involving human beings that do not contain responsibility and accountability. Islam teaches that on the Day of Judgment, humanity will be questioned on every action including how they treat the environment and animals:

> Then shall anyone who has done an atom's weight of good, see it! And anyone who has done an atom's weight of evil, shall see it. (Quran: 99:7-8)

Section III : Governing Rules In Islamic Environmental Ethics

The emphasis of the Quran and *hadith* on nature and natural phenomena does not imply that we cannot benefit from them. Indeed, the Quran clearly suggests that Allah SWT has created them such that man benefits from them. For example, the Quran says:

> And it is He Who has spread out the earth for (His) creatures. (Quran: 55:10)
>
> It is He Who has created for you all things that are on earth. (Quran: 2:29; 45:13; 31:20; 16:10-14; 22:65; 14:32–34)

The benefits that we take from the environment are not limited to material or physical ones. They also include mental and psychological benefits as well:

> And cattle He has created for you (men): from them you derive warmth, and numerous benefits, and of their (meat) you eat. And you have a sense of pride and beauty in them as you drive them home in the evening, and as you lead them forth to pasture in the morning. (Quran: 16:5&6)

There are some Quranic verses and *hadith* which state the spiritual or psychological benefits of plants. For example, Allah SWT says:

> And Who sends you down rain from the sky? Yes, with it We cause to grow well-planted orchards full of beauty and delight. (Quran: 27:60; 50:7; 22:5)

However, benefit from natural resources must be utilised in a responsible way. One of the most important Islamic principles related to the environment is the prohibition concerning consumption that is wasteful and extravagant. Islam permits utilisation of the environment but this should not be arbitrary and, in particular, should be free from wastefulness and extravagance:

> O Children of Adam! Wear your beautiful apparel at every time and place of prayer: eat and drink: but waste not by excess, for God loves not the wasters. (Quran: 7:31)

The eating and drinking in this verse can be interpreted as utilising all the resources acquired for the continuation of our lives. This should not be uncontrolled. The elements that support life should be conserved so that they can be utilised continuously.

Allah SWT also praises those who are moderate and are neither wasteful nor stingy:

> Those who, when they spend, are not extravagant and not niggardly, but hold a just (balance) between those (extremes). (Quran: 25:67)

On the contrary, Allah SWT calls us to maintain balance and orderliness:

> And the Firmament has He raised high, and He has set up the Balance (of Justice). In order that you may not transgress (due) balance. (Quran: 55:7-8).
>
> Verily, all things have We created in proportion and measure. (Quran: 54:49).

The following verses underline the same point and once more emphasise the importance of balance in the Quranic discourse:

> The sun and the moon follow courses (exactly) computed. And the herbs and the trees - both (alike) bow in adoration. And the Firmament has He raised high, and He has set up the Balance (of Justice). In order that you may not transgress (due) balance. So establish weight with justice and fall not short in the balance. (Quran: 55:5-9)

So, the key term here is "balance". It is evident from the above discussion that justice and balance are universal laws of God, and consequently man should conduct a just and balanced life. They must establish, firstly, that justice and balance are universal, secondly, that this universal balance was created by God, and thirdly, that man must attempt to comprehend this universal balance and to follow it in all aspects of his life including his interaction with the environment.

The Quran presents the fundamental views of Islam and these views are complemented and exemplified by the traditions, both sayings and actions, of Prophet Muhammad (PBUH). In this connection, it will be important to reflect on a prophetic attitude which reflects the Quranic spirit very clearly and powerfully. Prophet Muhammad (PBUH) attached great importance to the moderate use of water and forbade the excessive use of it, even when taking the ablutions, saying that to do so is reprehensible (*makruh*). He prevented people from using too much water even for something like ablutions when preparing to enter the divine presence for prayer:

> Prophet Muhammad (PBUH) said to Sa'ad (a companion) when He passed by the latter while the latter was busy doing wudu',

> "What is this wastage, O Sa'ad?" in which the latter replied, "Is there wastage in wudu'?" The Prophet (PBUH) answered, "Yes, even if you were at a flowing river." (Narrated by Ibn Majah)

In a nutshell, it is clear that man should not disturb the natural balance that Allah SWT has created. Man must maintain equity and justice not only in his social interactions but also eco-justice in his dealings with the environment:

> Be moderate and stand firm in trouble that falls to the lot of a muslim (as that) is an expiation for him; even stumbling on the path or the pricking of a thorn (are an expiation for him). (Narrated by Bukhari and Muslim)

> So eat and drink of the sustenance provided by God, and do no evil nor mischief on the (face of the) earth. (Quran: 2:60)

Further, man should not utilise the environment for his generation only but for future generations as well. It is a joint responsibility in which each generation is to make the best use of nature, according to its need, without disrupting or adversely affecting the interests of future generations. So, man should not abuse and misuse natural resources as each generation is entitled to benefit from them.

Section IV: Islamic Environmental Ethics Concerning Water, Earth, Plants, Animals And Land Conservation (*hima*)

Water

In Islam, water is very highly regarded. The word *maa'* (water) is used in the Quran about sixty times. Water is introduced as the origin and the source of life:

> We made from water every living thing. (Quran: 21:30)

A Muslim who wants to perform prayer or to touch the Holy Quran must be ritually pure, and to be ritually pure he needs to make ritual ablution with water. As a condition, the water used for ablution needs to be free of colour, smell or taste caused by impure substance such as human waste, blood and other substances well defined in Islamic law. If the three properties are

affected, the water shouldn't even touch the body or clothes of a Muslim or come in contact with his or her surroundings. Otherwise, the clothes and the area need to be purified and this is done using pure water. These teachings are critical because, as is well known, one of the greatest threats on human health is the lack of proper disposal and separation between water and waste-water (a clear impurity in Islamic law).

The following *hadith* shed some light on how to preserve water from impurities and hence prevent much human health harm:

> Jabir reported: The Messenger of Allah (PBUH) forbade urinating in stagnant water. (Narrated by Muslim)
>
> Abu Huraira reported: The Messenger of Allah (PBUH) said: None amongst you should urinate in standing water, and then wash in it. (Narrated by Muslim)

Prohibition Of Wastefulness

Muslims are required to perform ablution (washing or wiping of the face, hands, arms, hair and feet) before daily prayers and to perform a complete washing of the body after situations such as sexual intercourse. However, even with this critical spiritual and physical cleansing process, Islamic law constrains the amount of water to be used in each of these actions. Prophet Muhammad (PBUH) used to perform ablution using an amount of water equal to that which could be carried between the palms of the hands, known in Arabic as "*mud*". Contemporary Muslim scholars approximated this amount to 75 millilitres. Prophet Muhammad (PBUH) also used to shower using an amount of water equivalent in our time to approximately 1.5 litres.

The last *hadith* below, brings to light the fact that abundance of water (or by analogy any resources) does not nullify the prohibition of wastefulness. This principle is extremely needed in our times as many human beings had, in many instances, abused the resources thereby depriving those who do not have from ever having:

> Prophet Muhammad (PBUH) said to Sa'ad (a companion) when He passed by the latter while the latter was busy doing wudu',

> "What is this wastage, O Sa'ad?" in which the latter replied, "Is there wastage in wudu'?" The Prophet (PBUH) answered, "Yes, even if you were at a flowing river." (Narrated by Ibn Majah)

Earth

In Islam, the earth is introduced as an origin for the creation of human beings. The Quran says:

> From the (earth) did We create you, and into it shall We return you, and from it shall We bring you out once again. (Quran: 20:55)

Likewise, the earth is introduced as "a mother" for human beings. Prophet Muhammad (PBUH) was quoted as saying:

> Preserve the earth because it is your mother. (Nahj Al-Fasahah, No. 1130)

God has made means for the people, for their livelihood on the earth. Human beings should utilise the earth and construct upon it. The Quran says:

> It is He Who has produced you from the earth and settled you therein. (Quran: 11:61)

Plants

Islam highly recommends planting of trees. Prophet Muhammad (PBUH) said, "If a Muslim plants a tree or sows seeds, and then a bird, or a person or an animal eats from it, it is regarded as a charitable gift (*sadeqah*) for him." (Narrated by Bukhari)

There are many prophetic traditions advising us about the green environment. The *hadith* says, "The world is green and beautiful and Allah has appointed you as His stewards over it. He sees how you acquit yourselves." (Tirmidhi, 1934) (Hadith No. 2191)

In another tradition Prophet Muhammad (PBUH) said, "Whosoever cuts down a Lotus tree will have his head put into the Fires of Hell by God." Abu Dawud was asked about the meaning of this *hadith* and he said, "If there is a tree in an open space which provides shade for wayfarers and animals, and someone cuts it down, then God will put that person's head in the Fires of Hell." (Abu Dawud: Vol IV, p. 361)

In another *hadith* Prophet Muhammad (PBUH) said, "If the Hour starts to happen and in the hand of one of you is a palm shoot or seedling; then if he's able to plant it before the Hour happens, and then let him plant it". (Ahmad bin Hanbal, 2003) (Hadith No: 12689)

Animals

According to Islamic teachings, animals have numerous rights for which human beings are held responsible. Prophet Muhammad (PBUH) always showed great reverence, respect and love towards animals. He believed that as part of Allah SWT's creation, animals should be treated with dignity, and his *hadith* contain a large collection of traditions, admonitions and stories about his relationships with animals. It shows that he had particular consideration for horses and camels. To him, they were valiant companions during journey and battle, and he found great solace and wisdom in their presence.

Even in the slaughter of animals, Prophet Muhammad (PBUH) showed great gentleness and sensitivity. While he did not practise vegetarianism, his *hadith* clearly show that he was extremely sensitive to the suffering of animals. Thus, he recommends using sharp knives and a good method so that the animal can die a quick death with as little pain as possible. He also warned against slaughtering an animal in the presence of other animals, or letting the animal witness the sharpening of blades: to him, that was equal to "slaughtering the animal twice" and he emphatically condemned such practices as "abominable".

Land Conservation (*hima*)

Islamic law divides land conservation into two broad categories. One category is termed as *al-haram* (literally sacred) and refers to Mecca and certain parts of Medinah. The second category constitutes all other lands and is termed as *hima* (inviolate zone) in Arabic. These are undeveloped (*mûwât*) lands reserved for the purposes of a public good.

To ensure proper utilisation of *hima* land, Islamic law imposes certain conditions to ensure sustainable land management, creation of wildlife reserves, afforestation and ecosystem preservation. The Maliki school of jurisprudence (*madhhab*), for example, requires that –

(i) there is a public need and benefit to the community for such *hima*;

(ii) the area is proportional in size to the ecological concern at hand;

(iii) the land so declared cannot be commercialised or cultivated for financial gain; and

(iv) hunting, fishing, felling of trees and cutting of vegetation are prohibited.[10]

Section V: Concluding Remarks

In today's modern world, commercial values are unreasonably worshipped to the extent that entities in the environmental ecosystem are also valued based on their commercial status. This, consequently, leads to negative competition and fatality in some circumstances.

The widespread destruction of the environment are causing alarm in many quarters. Indeed, from some perspectives the future of human life itself appears threatened. Peter Raven, the director of the Missouri Botanical Garden, wrote in a paper titled "We Are Killing Our World" with a similar sense of urgency regarding the magnitude of the environmental crisis: "The world that provides our evolutionary and ecological context is in serious trouble, trouble of a kind that demands our urgent attention"[11].

10. Ali Ahmad, *Cosmopolitan Orientation of the Process of International Environmental Lawmaking: An Islamic Law Genre* (University Press of America, 2001) 49.

11 Mary Evelyn Tucker and John Grim, *'The Challenge of The Environmental Crisis'*; http://fore.yale.edu/publications/ books/cswr/the-challenge-of-the environmental-crisis.

Much of environmental degradation is due to people's ignorance of what their Creator requires of them. EcoIslamic writers "interpret" the destruction of the environment as *fasâd* (corruption) and as impairment of the delicate balance (*mizân*) of the creative order – a transgression for which humanity will be called to account.[12]

Discussions on the concept of *fasâd* featured prominently in EcoIslamic discourse. Translated as destruction, corruption or mischief, *fasâd* is said to apply to the realm of the environment as it does to any other part of life. It is the result of transgressing the limits of human behaviour as ordained by God. In addition, *fasâd* is "inflicted by man's unwary interference with the natural laws and environmental systems" and "[e]nvironmental pollution, which is tantamount to the disruption of natural balance, is the main form of corruption on the earth".[13] The Quran refers to this as follows:

> Mischief has appeared on land and sea because of (the evil) that the hands of men have earned, that (God) may give them a taste of some of their deeds: in order that they may turn back (from Evil). (Quran: 30:41)

According to Quranic commentator, Baydâwi, the meaning of *fasâd* is "dryness of the land, many fires, many drowned and a reduction in the blessings of God" [14]. Ibn Kathîr states that *fasâd* will result in the rain being withheld thereby reducing the amount of crops in both food plants and fruits; and will also cause adverse effects on sea and animals.[15] *Fasâd* is regarded as a test

12 Akhtaruddin Ahmad, Majid H.A. Hashim and Ghazi Al Hachim, *Islam and the Environmental Crisis*, (London: Ta-Ha Publishers, 1997).

13 Ghoneim, Karen, *'The Quran and the Environment'*, Islam Online (2009).

14 Izzi Dien, Mawil, *The Environmental Dimensions of Islam* (Cambridge: Lutterworth Press, 2000) 53.

15 Al Mubarakpuri, Safi ur Rahman, *Tafsir Ibn Kathir Volume 7* (Riyadh: Darussalam Publications, 2000) 53.

and punishment for what humankind has done on land and sea, since "Whoever disobeys Allah in the earth has corrupted it, because the good condition of the earth and the heavens depends on obedience to Allah" [16]. These interpretations, which extend the meaning of *fasâd* to incorporate environmental pollution and destruction, have been adopted widely by eco-Islamic thinkers. The Quranic verse cited above, it is argued, calls to humankind to desist from polluting and destroying the earth and to turn back from evil towards their 'innate' goodness - to their *fitrah*, the primordial nature of humankind.

The Islamic concept based on the fundamentals of *tawhid* as well as the awareness of trusteeship (*amanah)* and stewardship *(khalifah*) should be utilised as the core concept in the environmental theory.

As alluded to earlier, in Islam, the conservation of the environment is based on the principles that all individual components of the environment were created by Allah SWT and that all living beings were created with different functions; functions carefully measured and meticulously balanced by the Almighty Creator. Although the various components of the natural environment serve humanity as one of their functions, this does not imply that human usage is the sole reason for their creations.

People should be made to realise that the conservation of the environment is a religious duty demanded by God. Human interactions with the environment should not be overweening and should avoid excess or *taksub:*

> But waste not by excess: for God loves not the wasters. (Quran: 6:141)

As far as Muslims are concerned, they should remain "a people justly balanced" in all matters. Islam guides us to adopt the middle way:

16 *Supra* at page 554.

> To God belong both East and West: He guides whom He will to a Way that is straight. Thus, have We made of you an Ummah (nation) justly balanced, that you might be witnesses over the nations, and the Messenger a witness over yourselves. (Quran: 2:142 – 143)

The end of the world lies in our hands. Hence, we must be serious in protecting our environment. It is us who must change:

> Verily never will God change the condition of a people until they change it themselves. (Quran: 13:11)

United Nations Convention To Combat Desertification (UNCCD) – Malaysia's Obligations And Commitments

by

*Suraiya Mustafa Kamal**

Introduction

Desertification is a worldwide phenomenon which causes the earth's ecosystem to deteriorate. When land is threatened by desertification, there can be many effects on people living in that area. One fifth of the world's population is threatened by the impacts of global desertification. The consequences of desertification can be seen throughout the world be it in Asia, Latin America, North America, the Sahel or along the Mediterranean[1]. One third of the earth's surface is threatened by desertification which adds up to an area of over 4 billion hectares of the planet.

What is Desertification?

Desertification is not the natural expansion of existing deserts but the degradation of land in arid, semi-arid and dry sub-humid areas. It is a gradual process of soil productivity loss and the thinning out of the vegetative cover because of human activities and climatic variations such as prolonged droughts and floods.

Desertification can also be described as a process which turns productive land into non-productive desert as a result of poor land management. It occurs mainly in semi-arid land with average rainfall of less than 600mm. It took centuries to produce the thin crust of top soil but it can be washed away in a matter of weeks. If left unchecked, arable land is expected to shrink by one-third

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1. http://www.unccd.int

in Asia, two-thirds in Africa and one-fifth in South America exacerbating food insecurity, economic loss and mass migration from dryland rural areas, where the world's poorest reside.

Generally, desertification as a process can be seen as a series of incremental changes in biological productivity in arid, semi-arid and sub-humid ecosystems. It can encompass such changes as a decline in yield of the same crop or, more drastically, the replacement of one vegetative species by another less productive or useful species or even a decrease in the density of the existing vegetative cover. Desertification as the end result is a creation of desert-like conditions in areas once green as the end result of the process of change.

Desertification is a global problem, not only in its consequences, but also in its extent. It is far from being confined to land degradation in arid, semi-arid and dry sub-humid areas. The world's forests and woodlands are being reduced at an alarming rate in many parts of the world, and large areas are being overgrazed. The weakening of the vegetative cover can lead to a chain of ecosystem disturbances, reducing further the resilience of the ecosystems towards greater degradation. If prolonged, this can lead to desertification in a wide range of moisture regimes.

Though desertification affects Africa the most, where two-thirds of the continent is desert or drylands, it is not a problem confined to drylands in Africa. Over 30 per cent of the land in the United States is affected by desertification. One-quarter of Latin America and the Caribbean is deserts and drylands. In Spain, one fifth of the land is at risk of turning into deserts. The growing severity of the threat in the Northern Hemisphere is also illustrated by severe droughts in the United States and water scarcity in Southern Europe. In China, since the 1950s, sand drifts and expanding deserts have taken a toll of nearly 700,000 hectares of cultivated land, 2.35 million hectares of rangeland, 6.4 million hectares of

forests, woodlands and shrub lands. Worldwide, some 70 per cent of the 5.2 billion hectares of drylands used for agriculture are already degraded and threatened by desertification[2].

Why Does Desertification Occur?

Desertification is caused by "complex interactions among physical, biological, political, social, cultural and economic factors". Today, drylands are degraded by overcultivation, overgrazing, deforestation and poor irrigation practices[3].

In a nutshell, there are two main causes of desertification, namely, human factor and climate change.

a) **Human Factor**

The main human factor that causes desertification is the improper use of land resources. These resources include soil, vegetation and land water supplies. Human activities trigger desertification processes on vulnerable land and these activities vary by country, society, land use strategies and the technologies applied.

Among the human activities that can cause desertification are deforestation and poor water management and irrigation practices. Deforestation is a cause of desertification that occurs globally. The driving forces behind deforestation are magnified by the local and global availability or resources. All of the aspects of deforestation are in direct correlation to cutting down large tracts of trees. Once deforestation has occurred it is very difficult to try to regrow trees as the land has become inhabitable to most plant species[4].

2. http://www.unccd.entico.com
3. http://www.unccd.int
4. http://www.sackville.ednet.ca

b) **Climate Change**

Climatic changes are both a consequence and a cause of desertification. The destruction of the natural grass and woody vegetation cover in dry areas affects the topsoil temperature and the air humidity and consequently influences the movements of atmospheric masses and rainfall. Furthermore, the drying of the soils and the destruction of soil cover encourage air erosion.

Cycles of yearly drought and climatic changes can also contribute to the advance of desertification. Desertification becomes more severe, wide spread and visible as a result of an extended dry spell.

Climate variability causes desertification when there is a fluctuation in any or all of atmospheric variable such as precipitation, temperature, wind speed and direction and evaporation for a designed period of time usually of the order of months or decades. It may lead to alteration of an ecosystem which would eventually affect social activities that have been developed to exploit the productivity of that ecosystem.

Effects Of Desertification

Desertification reduces the ability of land to support life, affecting wild species, domestic animals, agricultural crops and people. The reduction in plant cover that accompanies desertification leads to accelerated soil erosion by wind and water.

Water is lost off the land instead of soaking into the soil to provide moisture for plants. Even long-lived plants that would normally survive droughts die. A reduction in plant cover also results in a reduction in the quantity of humus and plant nutrients in the soil and plant production drops further. As protective plant cover disappears, floods become more frequent and more severe. Desertification is self-enforcing, ie. once the process has started, conditions are set for continual deterioration.

Background To The United Nations Convention To Combat Desertification (UNCCD)

Desertification received worldwide attention when extended drought in the West African Sahel in the early 1970s caused loss of human lives and livestock and widespread environmental deterioration. Realising the danger of desertification, the international community met in Nairobi, Kenya in 1977 for the United Nations Conference on Desertification (UNCOD). The UNCOD instigated the world's awareness of the causes and effects of desertification[5].

However, due to a lack of support, both administrative and financial, attempts to efficiently tackle the problem of desertification were crippled. In June 1992, the delegates of UNCOD met in Rio de Janeiro, Brazil and agreed to elaborate on and consider drafting a Convention to combat desertification.

The United Nations Convention to Combat Desertification (UNCCD) was formally adopted on 17 June 1994 and opened for signature in Paris on 14 and 15 October 1994. The UNCCD came into force on 26 December 1996, ie. 90 days after 50 countries ratified the Convention. As at 14 January 1997 the UNCCD had been ratified by 60 countries. By March 2002, over 179 countries became parties to the UNCCD. By 23 September 2003, 190 countries have become members.

Strategies To Combat Desertification Under The UNCCD

The Convention was designed specifically to combat desertification in Africa. It does, however, provide for implementation of the Convention for other regions as well. Annex I is Regional Implementation Annex for Africa, Annex II is Regional Implementation Annex for Asia, Annex III is Regional

5. Sustainable Development, International Institute for Sustainable Development, Volume 4, Number 1 – A Summary Report on the International Symposium and Workshop on Combating Desertification.

Implementation Annex for Latin America & the Caribbean, Annex IV is Regional Annex for the Northern Mediterranean and Annex V is Regional Implementation Annex for Central & Eastern Europe. The five annexes are different and vary according to the respective regions.

Financial Mechanism

Article 21 of the UNCCD provides for a Global Mechanism (GM) to promote action leading to the mobilisation and channelling of substantial financial resources. This includes the transfer of technology on grant or concession terms to the developing countries for action to implement the Convention. It was not conceived to raise or administer funds. Rather, it seeks to promote greater coordination among existing sources of funding and greater efficiency and effectiveness. This mechanism is to operate under the guidance and authority of the Conference of the Parties (COP). Directions are to come from the COP on the promotion of the availability of financial mechanisms and the consideration of the approaches and policies that facilitate the provision of necessary funding at national, sub-regional, regional and global levels, promotion of the multiple source funding approaches, mechanism and arrangements and also providing of information about the availability of sources of fund.

The GM is jointly managed by International Fund for Agricultural Development (IFAD), United Nations Development Programme (UNDP) and the World Bank. Members of the Facilitation Committee of the GM include the regional banks, the Global Environment Facility (GEF) and the Secretariat of the Convention. The Convention also states that affected developing country parties are to establish and/or strengthened national coordinating mechanisms to ensure the efficient use of all available financial resources.

There are various organisations and bodies that are involved in programmes to combat desertification. Among the organisations that are contributing to this effort are the World Bank, the Food and Agriculture Organisation (FAO), UNESCO and the GEF.

Conference Of The Parties (COP)

Article 22 of the UNCCD established the Conference of the Parties (COP) to review regularly the implementation of the Convention and the functioning of its institutions. It oversees the implementation of the Convention. The COP acts as the supreme governing body of the Convention whose main task is to make the decisions necessary to promote effective implementation of the Convention. All parties are to provide reports to the COP on what they have done to implement the Convention.

The COP also establishes and guides subsidiary bodies as needed, considers and adopts the Convention's amendments as well as promotes and facilitates information exchange on measures adopted by the Parties.

The COP held its first meeting from 29 September to 10 October 1997 in Rome, Italy. The second meeting was held in December 1998 in Dakar, Senegal, the third in November 1999 in Recife, Brazil, the fourth in December 2000 in Bonn, Germany and the fifth in October 2001 in Geneva, Switzerland. As of 2001, the COP sessions were held on biennial basis and thus, the sixth meeting was held in Palacio de Convenciones, Havana, Cuba from 25 August to 5 September 2003, the seventh in Nairobi, Kenya from 17 to 28 October 2005, the eighth in Madrid, Spain from 3 to 14 September 2007, the ninth in Buenos Aires, Argentine from 21 September to 2 October 2009, the tenth in Changwon Gyeongnam, Korea from 10 to 21 October 2011, the eleventh in Windhoek, Namibia from 16 to 27 September 2013 and the twelfth in Ankara, Turkey from 12 to 23 October 2015.

Committee On Science And Technology (CST)

Article 24 of the UNCCD established the Committee of Science and Technology as a subsidiary body of the COP. The Committee is open to participation by all Convention parties and it meets in conjunction with normal COP sessions.

The Committee must provide the COP with information and advice on scientific and technological matters related to desertification and drought. Hence, the Committee has the tasks to collect, analyse and review relevant data, to promote cooperation to combat desertification and to mitigate the effects of drought through appropriate institutions, to provide research and development to contribute to the increase of knowledge on desertification and its impact, to distinguish casual factors both natural and human to combat desertification and to achieve improved productivity as well as the sustainable use and management of resources.

The Committee is composed of government representatives competent in the fields of expertise relevant to combat desertification and mitigating the effects of drought. It is multidisciplinary. Under the COP supervision, the Committee is expected to arrange for the surveying and evaluating of existing scientific networks and institutions willing to become part of a new network to support the Convention's implementation. Scientists worldwide are also encouraged to contribute their know-how and research results to this international effort.

Modern tools such as modern communications, satellite imagery and genetic engineering can help in combating desertification. Better weather forecasts and alerts can help to maintain or increase land productivity while improving food security and local living conditions, and developing new plant and animal varieties that are resistant to pests, diseases and other dry land stresses. For these reasons, the Convention commits the parties to promoting technological cooperation. The Convention calls for the promotion and financing of the transfer, acquisition, adaptation and development of technologies that can help to combat desertification and cope with its effects. Those technologies must be environmentally sound, economically viable and socially acceptable.

CST 12, the latest meeting held in Ankara, Turkey on 13 to 16 October 2015, was the most successful meeting ever held since the inception of the Committee.

Synergies With Other Environmental Conventions – Joint Liaison Group (JLG)

From 3 to 14 June 1992, the United Nations Conference on Environment and Development (UNCED), popularly referred to as the "Earth Summit", was held in Rio de Janeiro, Brazil to discuss ways and means of solving the major global environmental problems of our time, *inter alia*, to protect the atmosphere by combating climate change, depletion of the ozone layer and transboundary air pollution, to protect the oceans and seas and to protect as well as manage the land resources by combating desertification, deforestation and drought. Besides three important documents[6] adopted at the UNCED, three Conventions were separately negotiated and subsequently opened for signature. The three Conventions are United Nations Framework Convention on Climate Change (UNFCCC), United Nations Convention on Biological Diversity (UNCBD) and United Nations Convention to Combat Desertification (UNCCD).

Ideally, the definition of desertification recognises its potentially intricate links between climate change, biodiversity loss and human induced changes. Hence, there are numerous opportunities to trigger synergies among the three environmental Conventions adopted in the Rio process.

Hence, in August 2001, the secretariats of the UNFCCC, the UNCBD and the UNCCD established a Joint Liaison Group (JLG) with the main purposes of enhancing coordination among the three Conventions and exploring options of further cooperation, including the possibility of a joint work plan. The aims of the JLG are to collect and share information on the work programmes and operations of each Conventions, to harness collaboration among the three secretariats and to review progress

6. Rio de Janeiro Declaration on Environment and Development ("Rio Declaration"), Agenda 21 and Statement of Principles on Forests.

in the preparations for the joint workshop on synergy approaches. The participants of JLG's meetings include executive secretaries of the three Conventions, officers of the subsidiary bodies and members of the secretariats. The purpose of the JLG is to exchange information from recent meetings of the three Conventions, to share information on plans for the forthcoming years and to explore opportunities to enhance cohesion and synergies among the three secretariats and their respective subsidiary bodies. The responsibility for organising and chairing subsequent meetings rotates among the secretariats[7].

The Second Asian Ministerial Conference on UNCCD and the Sixth Session of the Conference of Parties (COP 6)

The Second Asian Ministerial Conference was held from 7 to 11 June 2003 in Abu Dhabi, UAE. As a result of this meeting, the issue on land degradation among Asian countries changed. The National Focal Point (NFP) of the Asian countries suggested a new proposal entitled "SEA Sub-Regional Action Program" (SEA-SRAP) which was included as one of the agenda at COP 6[8] of the UNCCD. As a result of SEA-SRAP, the Convention now concentrates on the issue of land degradation.

The Eleventh Session of the Conference of Parties (COP 11)

At COP 11[9], the Science-Policy Interface (SPI) was established with the goal to facilitate a two-way science-policy dialogue and to ensure the delivery of policy-relevant information, knowledge and advice on desertification, land degradation and drought (DLDD).

7. http://www.unccd.int.
8. Held in Havana, Cuba from 25 August to 5 September 2003.
9. Held in Windhoek, Namibia from 16 to 27 September 2013.

The SPI is expected to make science effective in the Convention's policy-making process. It comprises a body of globally renowned DLDD and political scientists who will identify the needs for scientific knowledge, explore mechanisms for addressing them and present findings to policymakers in a language that can be used to mould effective and sustainable land use policies to secure land productivity. The work of the SPI is guided by the objectives of its work programme.

During the biennium 2014-2015, the SPI had been working on four issues of, firstly, monitoring the contribution of sustainable land use and management to climate change adaptation and the safeguarding of biodiversity and ecosystem services, secondly, translating the outcomes of the Convention's third scientific conference into policy-oriented recommendations, thirdly, assessing the policy impacts of the Convention's first and second scientific conferences and proposing institutional arrangements for the improved provision of scientific advice to the Convention's decision-making processes, and fourthly, contributing to the scoping of the thematic assessment on land degradation and restoration conducted by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) and establishing a collaboration mechanism between the SPI and the Intergovernmental Technical Panel on Soils (ITPS), all of which were reported to CST 12[10]. In addition, the SPI also developed a draft work programme for the biennium 2016-2017 for consideration by the CST 12[11].

The Twelfth Committee On Science And Technology (CST 12) And The Twelfth Session Of The Conference Of Parties (COP 12) – "Ankara Initiative"

CST 12 which was held from 13 to 16 October 2015 in Ankara, Turkey in conjunction with COP 12[12] had very interactive and lively discussions. Six draft decisions were adopted in the

10. *Ibid*
11. *Ibid*
12. Held in Ankara, Turkey from 12 to 23 October 2015.

meeting's closing session which were forwarded to COP 12. All six decisions were then adopted by the COP 12 on 22 October 2015. The Committee's Chairman, Mr. Uriel Safriel, commented that this was the first session in the CST's history to test the UNCCD SPI efforts to channel scientific advice to the CST13[13]. The SPI played an active role during this session and put forward a policy oriented proposal based on the outcomes of the UNCCD 3rd Scientific Conference[14]. It also put forward options for improving the CST inputs to decision making and proposals for the use of land-based indicators across the Rio Conventions[15].

At CST 12, an ambitious work programme for the SPI in 2016-2017 was adopted to tackle the issues related to Land Degradation Neutrality (LDN), the restoration of degraded lands and the role of Sustainable Land Management (SLM) in addressing climate change mitigation and adaptation. CST 12 also adopted a decision regarding the dissemination of scientific knowledge and best practices through two UNCCD's knowledge products, the Capacity Building Marketplace[16] and the Scientific Knowledge Brokering Portal (SKBP)[17].

13. http://www.unccd.int
14. Cancun, Mexico, 2015.
15. http://www.unccd.int
16. An exchange platform for those seeking and offering knowledge, training and opportunities related to UNCCD's mandate as regards the issues of capacity building. It supports students, grassroots movements, professionals, researchers, civil society organisations, farmers' organisations and the general public to develop their full potential in the areas of sustainable land management and addressing the issues of drought. Additionally, it provides support tools and resources to country Parties to help facilitate the effective implementation of the Convention.
17. An access to reliable data and tacit knowledge as well as sharing of knowledge in an accessible and user friendly way to tackle the major environmental problems of desertification, land degradation and drought (DLDD).

With the adoption of the LDN by COP 12, "all countries will now formulate voluntary targets to achieve LDN according to their specific national circumstances and development priorities … The indicators will provide the basis for the monitoring and evaluation approach to assess implementation. The same indicators could guide the synergy Parties have always called for among the three Rio Conventions – desertification, climate change and biodiversity."[18]

In fact, the Parties' agreement in COP 12 followed the adoption of the new global Sustainable Development Goals, the "2030 Agenda for Sustainable Development", agreed upon by the member states at the United Nations General Assembly in New York held from 25 to 27 September 2015. In reality, the Conference in Ankara was responding to a key target for 2030 which is to combat desertification, restore degraded land and soil including land affected by desertification, drought and floods and strive to achieve a land-degradation neutral world[19]. As pointed out by Monique Barbut, UNCCD's Executive Secretary, the Parties' decision has put the Convention on par with the UNFCCC and the UNCDB, both of which have their own targets. In terms of financial sources, the Ankara Initiative which was valued at USD 5 millions from Turkey and an estimated USD 3 millions to be sourced from the GEF will provide initial support, including target setting[20]. An estimated USD 2 billions will be needed every year to support the actual restoration activities, and this could be mobilised through the Land Degradation Neutrality Fund which will be in operation by end of 2016 and with diverse sources of financing including from the private sector[21].

18. http://www.unccd.int; Miss Monique Barbut, Executive Secretary of the UNCCD.
19. See: Goal 15 of the 2030 Agenda "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss".
20. http://www.unccd.int
21. *Ibid.*

In welcoming the 2030 Agenda, Monique Barbut said, "Literally speaking, the health and productivity of the ground that we stand on will largely determine the future prosperity and security of humankind. In launching this ambitious development agenda, we also recognise the need for immediate climate action which means that sustainable land management and restoration must be front and centre on both of these global agendas."[22]

Having said of the intricate links between the UNCCD and the UNFCCC, it is important to also note the very recent concluded United Nations Conference on climate change.

2015 United Nations Climate Change Conference – "Paris Agreement"

This Conference was held from 30 November to 12 December 2015 in Paris, France and is also known as COP 21 to the UNFCCC and the 11th session of the Meeting of the Parties (CMP11) to the 1997 Kyoto Protocol. It negotiated the "Paris Agreement", a global agreement on the reduction of climate change, the text representing a consensus of the representatives of the 196 Parties attending the Conference. The Agreement was then deposited at the United Nations in New York to be opened for signature for one year beginning from 22 April 2016.

On 22 April 2016, which was also known as the "Earth Day", history was made when 175 Parties signed the Agreement in New York. Hence, making the Agreement enforceable. By consensus, the member Parties have agreed to reduce emissions as part of the method for reducing greenhouse gas. They agreed to reduce their carbon output as soon as possible and to do their best to keep global temperature rise this century well below 2 degrees Celsius above pre-industrial levels[23] and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

22. *Ibid.*

23. In the course of the debates, island state of the Pacific, the Seychelles, threatened by its very existence by sea level rise, had strongly voted for setting a goal of 1.5 degrees Celsius instead of only 2 degrees Celsius.

On 5 October 2016, the threshold for entry into force of the Paris Agreement was achieved. On 4 November 2016, the Agreement entered into force[24].

Malaysia And The UNCCD

Malaysia signed her consent to join the UNCCD on 6 October 1995 as the 88th member and ratified it on 25 June 1997. The countries joining the Convention are required to contribute financially to the Convention annually. Amongst the reasons why Malaysia ratified the Convention was because the developed countries intended to link the Convention with forestation and Malaysia, by ratifying the Convention, hopes to ensure that its interests in respect of this are not affected.

Under the UNCCD, desertification is defined as land degradation occurring in arid, semi-arid and dry sub-humid areas resulting from various factors which include climatic variations and human activities. As Malaysia does not fall squarely into this definition, except for the northern state of Perlis and the northern part of the state of Kedah which experience a short dry period of three months[25], the implementation of the Convention in the Malaysian context thus covers the broad aspects of preventing and addressing land degradation[26].

24. The first session of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA 1) took place in Marrakech, Morocco in conjunction with COP 22 and CMP 12.
25. In these states, desertification is not a problem even during the short dry period as there is sufficient soil moisture to sustain the growth of most vegetation.
26. http://www.thegef.org/gef/sites/thegef.org/files/documents/document/ncsa-malaysia-fr-ap.pdf;
Report On National Capacity Needs Self-Assessment for Global Environment Management and National Capacity Action Plan, Government of Malaysia, Ministry of Natural Resources and Environment, July 2008.

In January 2007, in line with the requirements as provided under Article 9 and Article 10 of the UNCCD, the Ministry of Natural Resources and Environment commissioned a project titled "National Capacity Needs Self-Assessment for Global Environmental Management and National Capacity Action Plan" (NCSA) with the funding provided by the GEF and administrative support from UNDP Malaysia. The primary objective of the project was to identify priorities and needs for capacity building and enhancement to address global environmental management requirements through the fulfilment of Malaysia's international obligations and commitments under the Rio Conventions, ie. the UNFCCC, the UNCBD and the UNCCD.

In Malaysia, land degradation is addressed sectorally based on needs. Activities related to mitigating land degradation have been carried out even before Malaysia joined the UNCCD, especially in forestry (this was one of the reasons Malaysia ratified the Convention) and agriculture sectors. The mitigation measures are carried out in the form of policies, legislation, rules and guidelines. The policies formulated for the said purposes are the Ninth Malaysia Plan (2006-2010), Tenth Malaysia Plan (2011-2015), Eleventh Malaysia Plan (2016-2020), Third National Agriculture Policy (1998-2010), National Physical Plan (2005), National Urbanisation Policy (2006), National Forestry Policy (1992) and National Policy on the Environment (2002). In terms of legal framework, the issues related to land degradation are addressed within the respective sectors of forestry, agriculture and plantations. Amongst the legislation that contribute towards the implementation of the UNCCD are the Land Conservation Act 1960, National Land Code 1965, Environmental Quality Act 1974, Town and Country Planning Act 1976, National Parks Act 1980, National Forestry Act 1984, Sabah Land Ordinance Cap.68, Sabah Forest Enactment 1968, Sarawak Forests Ordinance 1954, Sarawak State Land Code Ordinance 1997 and Sarawak State Land Use Ordinance 1997. The focal point for the

implementation of the UNCCD in Malaysia is the Policy and Strategic Planning Division of the Ministry of Agriculture and Agro-Based Industry.

In the three Malaysia Plans (ie. the Ninth Malaysia Plan, the Tenth Malaysia Plan and the Eleventh Malaysia Plan), Malaysia had taken efforts to fulfil her international obligations and commitments under the Rio Conventions (ie. the UNFCCC, the UNCBD and the UNCCD). As a result of the Ninth Malaysia Plan (2006-2010), Malaysia implemented the reduction of emissions from deforestation and forest degradation that saw an estimated total of 97.5 million tonnes of carbon dioxide emissions avoided through improved forest management for the period between 2006 until 2010[27].

During the Tenth Malaysia Plan (2011-2015), the importance of environmental sustainability was recognised as part of a comprehensive socio-economic development plan. Measures to address the issues of climate change, environmental degradation and sustainable utilisation of Malaysia's natural endowment were therefore featured in this Plan. One of the measures taken was to declare 23,264 hectares of forested areas as Permanent Reserved Forest under the Central Forest Spine initiative, helping to sustain Malaysia's natural endowment[28]. This effort is to be continued under the Eleventh Malaysia Plan (2016-2020) under the "Green Growth Agenda" which calls for strengthening the enabling environment including policy and regulatory frameworks, human capital and green technology.

In the Eleventh Malaysia Plan (2016-2020), green growth will be a fundamental shift in how Malaysia sees the role of natural resources and the environment in its socio-economic

27. http://www.theborneopost.com/2015/12/09/malaysia-committed-to-stop-forest-loss-degradation/.
28. http://www.rmk11.epu.gov.my/book/eng/chapter-6/chapter6.pdf; Pursuing Green Growth for Sustainability and Resilience.

development, protecting both development gains and biodiversity at the same time[29]. To achieve this, the Government will focus on four key areas in pursuing green growth for sustainability and resilience. The four keys are: firstly, strengthening the enabling environment for green growth; secondly, adopting the sustainable consumption and production concept; thirdly, conserving natural resources for present and future generations; and fourthly, strengthening resilience against climate change and natural disasters[30].

On 7 December 2015, during a speech for the joint high-level segment of COP 21/CMP 11 of the Paris Agreement, Dato' Sri Wan Junaidi Tuanku Jaafar, Natural Resources and Environment Minister, was reported as saying that Malaysia is committed in maintaining at least 50 per cent of forest and tree cover in perpetuity through "zero net deforestation and degradation" thus halting net forest loss by deforestation and stopping net decline in forest quality[31]. He was reported to have further said that this could be achieved by reforestation and enrichment of degraded land to increase carbon sequestration and mitigate climate change effects and more effectively through expanding the forest reserves and protected areas under the Heart of Borneo and the Central Forest Spine initiatives of which 6 million hectares of land area had been identified for the former and 144,000 hectares of land for the latter[32]. The Minister was also reported to have said that our financial, technical and capacity limitations, among other things, can hinder our progress and efforts to manage and conserve the natural resources, and thus, external funding which includes technology transfer and capacity-building can offer viable solutions[33].

29. *Ibid.*
30. *Ibid.*
31. http://www.theborneopost.com/2015/12/09/malaysia-committed-to-stop-forest-loss-degradation/.
32. *Ibid.*
33. *Ibid.*

Amongst the developing countries, especially the ASEAN countries, Malaysia can play an active role in the UNCCD to promote and to support "South-South and ASEAN Cooperation". This includes the need to develop a mechanism to control and reduce land degradation and to manage natural resources.

At present, by having environmental policies as well as laws and technical guidelines besides ensuring a well-planned land development, Malaysia can be said to have developed her own expertise and valuable knowledge in handling the issue of land degradation. By these standards, Malaysia can give her contribution to other tropical developing countries to combat land degradation. Therefore, with the signings of the Ankara Initiative and the recent Paris Agreement, Malaysia can be in the frontline to prevent and address the issue of land degradation and to promote Land Degradation Neutrality (LDN) under the UNCCD by contributing her knowledge and expertise in the Convention's future meetings. Furthermore, Malaysia should take advantage of the two UNCCD's most recent knowledge products, the Capacity Building Marketplace[34] and the Scientific Knowledge Brokering Portal[35], which were adopted during the meeting of CST12 at Ankara, Turkey in October 2015 and the Land Degradation Neutrality Fund which had been planned to be in operation by end of year 2016, as well as the benefits of technological cooperation between member Parties as promoted by the Convention under Article 24.

Conclusion

The problem of land degradation occurs in tropical countries, such as Malaysia, due to heavy rain that can cause land erosion and landslide. Land degradation also affects the quantity and quality of freshwater supplies. Mismanagement of land will lead to food insecurity, increasing poverty, and water scarcity and increased vulnerability to climate change.

34. See fn16.

35. See fn17.

Established in 1994, the UNCCD is the international legally binding agreement which promotes a global response to desertification, land degradation and drought (DLDD). Developed as a result of the Earth Summit in Rio de Janeiro in 1992, the UNCCD is a unique instrument that focuses attention on land degradation and the social and economic problems it causes.

As the dynamics of land, climate and biodiversity are so intimately connected, the UNCCD works closely with the other two 'Rio Conventions' (ie. the UNCBD and the UNFCCC) to meet these complex challenges with an integrated approach and the best possible use of natural resources. Thus, the UNCCD cannot be viewed in isolation from other efforts to promote sustainable development. There must be interactions between the issues of sustainable development, climate change, biological diversity, water resources, energy resources, food security and socio-economic factors.

Be that as it may, efforts to combat desertification also complement efforts to protect biological diversity. Even though the issue of biodiversity is always connected to rainforests, dry land ecosystems also contain a rich biota including plant and animals not found elsewhere. Many of human's most important food crops, such as barley, originated from dry land. Dry land species also provide drugs, resins, waxes, oils and other commercial products. Dry land too provide critical habitats for wildlife including large mammals and migratory birds. These habitats are particularly vulnerable to land degradation.

As the consequences of land degradation are alarming, soil fertility and land management have become the defining issues in the 21st century. As part of Malaysia's obligations and commitments under the UNCCD (as well as the UNFCCC and the UNCBD), issues of improper practices in land use, such as the current issue of bauxite mining which had left some parts of our land barrenly red (and the mining was thus ordered to be stopped), and the long overdue issues of deforestation and

landslides, must be tackled proactively and immediately. Malaysia must make full use of her membership in the Rio Conventions (ie. the UNFCCC, the UNCBD and the UNCBD) to generate much assistance and valuable knowledge from the international community in order to protect and preserve her precious land for the benefits of her children as well as future generations. As rightly pointed out by Monique Barbut:

> For a long time, we have left the land – our Queen – vulnerable …. But you have made some strategic moves …. There was no check-mate here. But by adopting Land Degradation Neutrality as an organizing principle, you have given us a clear game-plan and vision and direction for the future.[36]

36. http://www.unccd.int.

Environmental Impact Assessment Regime In Malaysia: Reflections On Some Legal Issues

by

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Let us be good stewards of the Earth we inherited. All of us have to share the Earth's fragile ecosystems and precious resources, and each of us has a role to play in preserving them. If we are to go on living together on this earth, we must all be responsible for it.

Kofi Annan[1]

Introduction

Between February and early May 2016, Southeast Asia experienced the most intense heatwave ever observed in the region. In Thailand, the heatwave was considered the worst since reliable records have been kept in that country. On 28 April 2016, the town of Mae Hong Soon recorded the hottest temperature on record in Thailand (44.6 degrees Celsius). Cambodia and Laos set new all-time record highs for any day of the year in April. Malaysia, Singapore and Vietnam all came very close to setting new national heat records.[2]

In Malaysia, near national record of 39.2 degrees Celsius was recorded at Batu Embun in Pahang and it was the hottest temperature ever recorded in central Malaysia. In March 2016,

* The views expressed in this article are solely that of the Research Division, and do not, in any way, represent the official position or views of the Attorney General's Chambers, Malaysia.

1. Kofi Annan served as the seventh Secretary General of the United Nations from 1 January 1997 to 31 December 2006.
2. C. Burt, 'Extraordinary Heat Wave Sweeps South East Asia and Points Beyond'; https://www.wunderground.com/blog/weatherhistorian/extraordinary-heat-wave-sweeps-southeastasia-and points-beyond.

temperature in Chuping, a town in Perlis, reached 39.5 degrees Celsius. Near national record was set in Singapore with a 36.6 degrees Celsius reading on 17 April 2016. Likewise, Mindanao Island in the Philippines observed its highest temperature on record at General Santos with a 39.4 degrees Celsius reading on 16 April 2016.

The heatwave fueled a new record for energy consumption in the region as the public in general increased their usage of air conditioners. It also prompted health warnings on everything from foodborne illnesses to drowning, which was expected to follow after the dry season.

While Southeast Asia was experiencing extreme heat, during the same period, Australia was experiencing heavy rains and storms. In Darwin, torrential rains brought twice the average rainfall for the whole month of May while Tasmania and Victoria experienced heavy rain and strong wind gusts, bringing down trees and damaging buildings. Waves in excess of six metres battered many western coastal areas.[3]

This climate was observed as unprecedented in the countries concerned. This phenomenon and changing climate could be attributed to, among others, the degradation of the environment. One of the main contributors to the worsening state of the environment in many countries, particularly in the developing world, arguably is the carrying out of major development projects using unsustainable means without proper supervision and regulation, resulting in severe adverse effect to the environment. Uncontrolled clearing of the forest without a proper study on its effects to the surrounding environment is another factor. Hence, there is a need to regulate development projects in a manner that it causes minimal impact on the environment. Left unchecked, it could result in economically and socially devastating consequences to the environment and untold damages to the countries concerned.

3. www.theguardian.com/news/2016/may/04/elnino-india-south-east-asia-heatwave-temperatures-storms-australia

These concerns led to the development of Environmental Impact Assessment (EIA) as a tool to safeguard the environment in any development project. The contemporary usage of the EIA has its origins in the United States of America with the legislation of the U.S. National Environmental Policy Act 1969 (the NEPA). With the introduction of the NEPA, all federal agencies were required to consider the environmental impacts of their decisions. Section 102(2)(c) of the NEPA provided that "all agencies of the Federal Government shall include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on the environmental impacts of the proposed action and its alternatives."[4]

By the early 1990s, over forty countries had EIA programmes. Some countries set up their EIA programmes using legislation, while others relied on executive action and administrative orders.[5] The EIA is now a global tool for ensuring that environmental concerns are integrated into development projects or programme planning processes. Most developing countries, including Malaysia, have embraced the EIA and formalised its requirement through legislation. This article seeks to lay out what an EIA is, unravel the EIA regime as enforced in Malaysia and discusses two legal issues arising therefrom in the light of recent developments in the law, case laws and some recent events, as well as make some recommendations to address the issues highlighted.

What is an EIA?

EIA is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both

4. Ortolano, L & Shepherd, A, 'Environment Impact Assessment: Challenges and Opportunities'; http://dx.doi.org/10.1080/07349165.1995.9726076.
5. *Ibid.*

beneficial and adverse.[6] United Nations Environment Programme (UNEP) defines EIA as a tool used to identify the environmental, social and economic impacts of a project prior to decision-making. It aims to predict environmental impacts of a project at an early stage in project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment and present predictions and options to the decision-makers, which are the relevant authorities.[7]

It is essentially a planning mechanism for preventing environmental problems due to any activity. It ensures that potential problems are foreseen and addressed at an early stage in the project planning and design. Thus, it avoids costly mistakes in the project implementation, either in terms of the damage that is likely to arise during the project implementation, or because of modifications that may be required subsequently in order to make the activity environmentally acceptable.[8] Essentially, EIA has three main functions, namely, to predict problems, to find ways to avoid them and to enhance positive effects upon execution of the development projects.[9]

6. Convention on Biological Diversity, "What is Impact Assessment?"; https://www.cbd.int/impact/whatis.shtml.
7. *Ibid.*
8. Department of Environment, Ministry of Natural Resources and Environment, 'Environmental Impact Assessment in Malaysia, An Evolution' (2012).
9. Natural Resources Management and Environment Department of the United Nations, 'Environmental Impact Assessment of Irrigation and Drainage Projects'; http://www.fao.org/docrep/v8350e/v8350e04.htm, 1.

The aim of the EIA is to protect the environment by ensuring every local plan fulfills the requirement needs of the authorities when deciding to grant planning permission for a project.[10] It is a decision-making process of evaluating the likely environmental impacts of a proposed project or development considering several factors such as inter-related socio-economic, cultural and human-health impact. The regulations set out a procedure for identifying those projects which should be subjected to the EIA, and for assessing, consulting and coming to a decision on those projects which are likely to have significant environmental effects. The aim of the EIA is also to ensure that members of the public are given early and effective opportunities to participate in the decision-making procedures.[11]

EIA Regime In Malaysia

The beginning of environmental management in Malaysia may be traced to the period just after the United Nations Conference on Human Environment 1972 in Stockholm. It was realised then that there was a need to establish an environmental agency to manage the increasing environmental issues in the country, such as the floods in mid-1960s and early 1970s and public complaints of pollution caused by rubber and oil palm processing industries.[12] This resulted in the enactment of the Environmental Quality Act 1974 [Act 127] (the EQA). It also paved the way for the establishment of the Department of Environment (the DOE) on 1 September 1983.[13]

10. Department for Communities and Local Government of United Kingdom, 'The purpose of Environmental Impact Assessment'; http://planningguidance.communities.gov.uk/blog/guidance/environmental-impact-assessment/the-purpose-of-environmental-impact-assessment/, 1.
11. *Ibid.*
12. *Supra*, n. 8, p 2.
13. The DOE was previously the Division of Environment placed under the Ministry of Science, Technology and Environment. After it was upgraded as a full Department, it was placed under the Ministry of Natural Resources and Environment in March 2004.

There was no provision, however, relating to the requirement of EIA in the EQA until 1986. Provisions relating to the legal requirement in respect of the EIA were introduced through the insertion of section 34A to the EQA.[14]

Section 34A provides that the Minister charged with the responsibility for environment protection may, by order, prescribe any activity which may have significant environmental impact as a prescribed activity. It further provides that any person intending to carry out any prescribed activity shall submit a report to the Director General, which contains an assessment of the impact such activity will have or is likely to have on the environment and the proposed measures that shall be undertaken to prevent, reduce or control the adverse impact on the environment.[15]

If the Director General, upon examining the report, is of the opinion that the report is satisfactory and the measures to be undertaken to prevent, reduce or control the adverse impact on the environment are adequate, he shall approve the report and inform the applicant accordingly.[16] However, if he is of the opinion that the report is not satisfactory or that the measures to prevent, reduce or control the adverse impact on the environment are inadequate, he shall not approve the report and give his reasons accordingly. This does not preclude the applicant from subsequently submitting a revised report to the Director General for his approval.[17]

Where the report is approved by the Director General, the person carrying out the prescribed activity shall provide sufficient proof, in the course of carrying out the activity, that the

14. Section 34A was inserted in EQA *vide* Amendment Act A636 which came into force on 10 January 1986.
15. See subsection (2).
16. See subsection (3).
17. See subsection (4).

conditions attached to the report, if any, are being complied with and that the proposed measures to prevent, reduce or control the adverse impact on the environment are being incorporated into the design, construction and operation of the prescribed activity.[18] It also provides that the applicant shall not carry out any such prescribed activity until the report submitted under section 34A has been submitted and approved.[19]

Any non-compliance with section 34A is an offence and the offender shall be liable upon conviction to a fine not exceeding RM100,000 or to imprisonment for a period not exceeding five years or to both. Where the offence is continuing, he shall be fined a further RM1,000 for every day that the offence continues.

Pursuant to the powers conferred by section 34A, the Minister made the Environmental Quality (Prescribed Activity) (Environmental Impact Assessment) Order 1987[20] (the 1987 Order). In the 1987 Order, the Minister prescribed nineteen activities as "prescribed activities", i.e. activities which require an EIA to be carried out before their implementation. The activities prescribed therein, *inter alia*, are agriculture, airport, drainage and irrigation, land reclamation, fisheries, forestry, housing, mining, quarries, railways, transportation and waste treatment and disposal.

A significant feature of the 1987 Order is that most of the prescribed activities are described in terms of the size of the development in respect of such activities. Hence, a prescribed activity exceeding the size stipulated in the 1987 Order requires an EIA to be carried out and approved prior to its implementation. For example, with regard to –

(a) agriculture (only land development schemes covering an area of 500 hectares or more to bring forest land into agricultural production);

18. See subsection (7).

19. See subsection (6).

20. P.U. (A) 362/87 which came into effect on 1 April 1988.

(b) airport (only construction of airports having an airstrip of more than 2,500 metres);

(c) land reclamation (only coastal reclamation covering an area of 50 hectares or more);

(d) forestry (conversion of hill forest land use covering an area of 50 hectares or more);

(e) resort and recreational development (construction of coastal resort facilities or hotels with more than 80 rooms); and

(f) housing (housing development covering an area of 50 hectares or more),

EIAs are required to be carried out and approved prior to their implementation. Failure to do so would attract prosecution under section 34A of the EQA.

An illustration of this is the case of *Tenggara Gugusan Holidays Sdn. Bhd. v. Public Prosecutor*[21]. In that case, the appellant was convicted and was fined RM20,000 by the Sessions Court for carrying out construction of coastal resort facilities which is a prescribed activity under Item 17(a) of the 1987 Order. It was found that the appellant had carried out construction of one hundred units of coastal chalets with more than eighty rooms. However, he did not submit an EIA report for approval as required by section 34A. The appellant appealed against the conviction but the High Court dismissed the appeal and ruled that the construction of more than eighty units of coastal chalets by the appellant was a prescribed activity and thus, an EIA report has to be submitted prior to undertaking of the construction.

The 1987 Order, however, was revoked by the Environmental Quality (Prescribed Activity) (Environmental Impact Assessment) Order 2015[22] (the 2015 Order). Under the 2015 Order, several

21. [2003] 1 MLJ 508; [2003] 1 LNS 24 HC.

22. P.U. (A) 195/2015 which was made on 5 August 2015 and came into effect on 28 August 2015.

new activities are listed as "prescribed activities". The scheme of listing of prescribed activities is also different in the 2015 Order. Prescribed activities are now listed in two Schedules, namely, First and Second Schedules. The activities specified in the First Schedule do not require public display and public comment unless instructed by the Director General of the DOE, whilst activities specified in the Second Schedule require public display and public comment. The 2015 Order, therefore, provided expressly for public consultation prior to approval of the EIA report.

The 2015 Order has also widened the list of "prescribed activities", beyond the activities listed in the First and Second Schedules. Order 4 provides that the following activities are also "prescribed activities", namely, -

(i) any prescribed activity which has been divided into a size or quantum smaller than the size or quantum specified in the First and Second Schedules; or

(ii) any activity involving the increase in size or quantum resulting in such activity to be categorised as prescribed activities.

This provision is perhaps inserted to address situations where certain developers circumvented provisions in the 1987 Order by subdividing lands or coastal areas into sizes smaller than the size specified in the 1987 Order, thereby avoiding the requirement to submit EIAs to the relevant authorities. This issue will be discussed further below.

Another significant difference brought about in the 2015 Order is in its application to Sabah and Sarawak. Order 4 lists specific prescribed activities in the First and Second Schedules which are applicable to the States of Sabah and Sarawak. Thus, ostensibly it appears that prescribed activities which are not listed in Order 4 has no application to the two States.

Subsection 1(1) of the EQA provides that the EQA shall apply to the whole of Malaysia. However, the two East Malaysian States of Sabah and Sarawak have also enacted their own legislation

which makes provisions for the protection and conservation of the environment in the two States. It includes provisions requiring the submission of EIA for certain prescribed activities. Thus far, none of the States in Peninsular Malaysia have taken similar steps to enact their own legislation in this regard.

Legislation On EIA In Sabah

In Sabah, provisions relating to the protection of the environment are provided for in the Environment Protection Enactment 2002 (the Sabah Enactment).[23] Section 12 is of importance with regard to the submission of EIA reports. It provides that the Minister may prescribe the types of development activity which are likely to have an effect on the environment.[24] Pursuant to this power, the Minister has prescribed the Environment Protection (Prescribed Activities) Order 2005.[25] This Order specifies twelve activities which are likely to have an adverse effect on the environment.

Subsection (2) empowers the Director of the Environment Protection Department of Sabah to categorise the development activities specified by the Minister in subsection (1) having regard to the significance of the adverse effect of such development activities on the environment. Pursuant to this power conferred by subsection 12(2), the Director has accordingly issued the Environment Protection (Prescribed Activities) (Environmental Impact Assessment) Order 2005[26] (the 2005 Order) which specifies twelve activities for which an EIA report or a proposal for mitigation measures has to be submitted and approved by the Director before such development activity is carried out.

23. Enactment No. 12 of 2002 gazetted on 19 November 2002.
24. Subsection (1).
25. G.N. 15/2006 which was made on 23 August 2005 and came into effect on 3 January 2006.
26. G.N. 15/2006 which was made on 23 August 2005 and came into effect on 3 January 2006.

The scheme of prescribing the prescribed activities in Sabah is slightly different from the scheme in the Orders issued under the EQA. Under the 2005 Order in the Sabah Enactment, prescribed activities are listed in the First and Second Schedules. The First Schedule lists activities for which a proposal for mitigation is required, whereas the Second Schedule specifies activities for which an EIA report is required.

As in the EQA, the Sabah Enactment empowers the Director to consider the proposal for mitigation or the EIA report submitted in respect of the prescribed activity, whichever the case may be, and approve it if he is of the opinion that the report provides for the protection of the environment, and to not approve it if he is not so satisfied.

One significant and interesting provision in the Sabah Enactment, which is not provided for in the EQA, is section 13. It provides that, notwithstanding the prescribed activities specified in the Order, the Director is further empowered to require an EIA report to be submitted for any activity not prescribed in the Order, if he is of the opinion that such activity has or is likely to have an adverse effect on the environment. In a way, this provision gives wider power to the Director of the Environment Protection Department of Sabah as compared to the Director General of DOE or the Sarawak Natural Resources and Environment Board with regard to the requirement of EIA reports.

Legislation On EIA In Sarawak

The parent legislation on the management and conservation of environment and natural resources in Sarawak is the Natural Resources and Environment Ordinance, 1993 (the Sarawak Ordinance).[27] The provision on the requirement for EIA reports is found in section 11A of the Sarawak Ordinance.[28]'

27. Chapter 84 Laws of Sarawak (1958 Edition), Sarawak L.N. 4/84. It came into effect on 1 February 1994.

28. Section 11A was inserted *vide* Natural Resources (Amendment) Ordinance 1993 [Cap A 12].

Section 11A provides that the Natural Resources and Environment Board[29] (the Board) may require any person undertaking any of the activities listed in paragraphs (a) to (j) in subsection (1) to submit to the Board a report from an expert or authority on the impact of such activities on the natural resources and environment (the EIA report). The activities listed, *inter alia*, are –

(i) development of agricultural estates or plantations;

(ii) clearing of forest areas for the establishment of agricultural estates or plantations;

(iii) exploration for minerals, mining, farming, clearance of vegetation and setting up agricultural estates;

(iv) extraction and removal of rock materials;

(v) establishment of landfills; and

(vi) plants for the treatment of sewage and waste water.

Subsection 11A (1) also empowers the Board to make rules, by Order published in the Gazette, to regulate the requirement of EIA reports. In the exercise of this power, the Board made the Natural Resources and Environment (Prescribed Activities) Order 1994 (the 1994 Order).[30]

The First Schedule to the Order lists prescribed activities for which an EIA report is required to be submitted before commencement of the activity. There are seven categories of prescribed activities specified in the First Schedule which, *inter alia*, includes agricultural development, logging, development of commercial industrial housing estates, fisheries, removal of rock materials and mining.

29. The Board is constituted under section 3 of the Ordinance and is chaired by the Minister responsible for natural resources.

30. Swk. L.N. 45/94 which came into effect on 1 September 1994.

Order 3 provides that any person who intends to undertake any of the prescribed activities shall submit to the Board a report on the impact of such activities on the environment and on the sustainable utilisation, preservation and management of natural resources in Sarawak as well as on the preventive, mitigating or abatement measures to be taken for the protection and enhancement of the environment. It further provides that no prescribed activities shall be carried out or commenced until such report has been considered by the Board and the Board has given permission in writing for such activities to be undertaken or commenced.[31]

The scheme of prescribed activities in the 1994 Order under the Sarawak Ordinance mirrors that in the Order prescribed under the EQA. The prescribed activities are described in terms of the size of the development in respect of such activities. Hence, prescribed activities exceeding the size stipulated in the 1994 Order require an EIA to be carried out and approved prior to their implementation. For example, with regard to –

(a) agricultural development (development of agricultural estates and plantations of an area exceeding 500 hectares);

(b) logging, extraction or felling of timber from an area exceeding 500 hectares;

(c) development of commercial, industrial and housing estates (development of an area exceeding 10 hectares); and

(d) activities which may pollute inland water (development of groundwater with a supply capacity of 4500 cubic meters per day),

EIAs are required to be carried out and approved prior to their implementation. Failure to do so could result in prosecution under subsection 11A(7) of the Sarawak Ordinance.

31. Order 6.

Legal Issues In EIA Implementation

In the course of the implementation of EIA provisions in Malaysia, several legal issues have arisen. Two of those issues are as follows:

(i) legislative power to make provisions relating to the environment; and

(ii) circumvention of subsidiary legislation governing EIA.

The issues mentioned above are by no means exhaustive or the only legal issues that have arisen, but for purposes of this article these two issues were picked for discussion.

(i) Legislative Power To Make Provisions Relating To The Environment

Central to this issue is the question of who has the legislative power to enact laws relating to the environment, or more specifically for the preservation and conservation of the environment. In the context of this article, this leads us to the question of who has the legislative competence to make laws, rules and regulations on the EIA requirements in Malaysia. Is it the Federal Legislature (Parliament) or is it the State Legislature?

Malaysia is a Federation which has a central Federal Government, whilst the States are governed by their respective State Governments. The Federal Constitution is the supreme law of the land and it makes provisions for the distribution of legislative power between Parliament and the State Legislature. It is noted that there is no specific provision in the Federal Constitution which lays out the responsibility to protect and improve the environment.

The distribution of legislative powers between the Federation and the States is provided for in Article 74 of the Federal Constitution. It provides that Parliament may make laws in respect of matters enumerated in List I of the Ninth Schedule while the respective State Legislature may make laws with regard

to matters specified in List II of the Ninth Schedule. Both Parliament and the State Legislature may make laws in respect of matters enumerated in List III of the Ninth Schedule. The residual power of legislation to make laws on matters not enumerated in any of the three Lists lies with the State Legislature.[32]

A perusal of the three Lists does not shed any light as nowhere in the Lists is "environment" specified as a separate legislative subject. However, List I does include an item on "external affairs, … implementation of treaties, agreements and conventions with other countries." This means that any laws made to implement Malaysia's obligations under any international convention comes within the purview of Parliament to legislate.[33] List II, on the other hand, among others, specifies land, agriculture, forestry and water, which can be regarded as components of what makes up the environment, as matters which come within the power of the State Legislature to make laws. List III, the Concurrent List, of which both can legislate, include matters such as protection of wild life, public health and sanitation, drainage and irrigation. However, "environment" itself as a subject is not specifically listed in any of the three Lists.

As discussed above, currently Parliament and the legislatures of the two State Governments, namely Sabah and Sarawak, have respectively enacted laws in relation to the preservation and enhancement of the environment, namely, the EQA, the Sabah Enactment and the Sarawak Ordinance. A study of the provisions in all three legislation and the Hansard of the respective legislature did not shed any light as to the source of power, particularly under the Federal Constitution, under which the respective laws were enacted. Hence, it is unclear under which item of List I, List II or List III of the Ninth Schedule were the

32. See Article 77 of the Federal Constitution.

33. As a dualist state, obligations under international instruments have to be brought into force in Malaysia through domestic laws.

three statutes made. This gives rise to conflicting arguments on whether Federal Legislature or State Legislature should legislate on matters relating to the environment.

It is postulated that difficulties could arise when both Federal Legislature and State Legislature legislate on a similar matter without clear demarcation as to the extent of their powers. The absence of such clear demarcation could lead to conflicting provisions, for example, the insertion of the EIA requirements into the Federal and State legislation could result in the difficult question of who takes precedence.

The existence of both Federal and State environmental legislation could further lead to unnecessary overlaps and duplications.[34] It could lead to jurisdictional disputes between the Federal Government and the State Governments as well as inconsistencies between the laws enacted by the two legislatures.[35] In the context of the EIA, problems could arise in the EIA requirements between the Federal statutes and State statutes, particularly where they are in conflict with each other.

Another difficulty could be in the area of the standards on the EIA requirements imposed in the Federal and State legislation. One may be more stringent than the other. One may set a higher standard for approval of the EIA reports before the implementation of the prescribed activities. Again, the question may arise as to which takes precedence.

These problems lead to haphazard development in the law with regard to the EIA requirements, particularly where there is a lack of communication between the relevant authorities in the Federal Government and the State Governments. It could result in

34. Muhammad Yusuf Saleem, 'Environmental Issues in a Federation: The Case of Malaysia' in *Intellectual Discourse,* Vol. 13, No. 2 (2005) 201-212, p. 203.
35. *Ibid.*

different paths taken by the Federal Government and the State Governments in their approach to the EIA, bearing in mind the different interests that each State or Federal Government may prioritise.

This issue and the resultant difficulties were at the forefront in the case of *Ketua Pengarah Jabatan Alam Sekitar & Anor v. Kajing Tubek & Ors and Other Appeals*[36]. This case related to the construction of the Bakun Hydroelectric Project (the Project) near Belaga in Kapit Division in the State of Sarawak. The Project involved the inundation of a very large tract of land, the construction of a reservoir and a water catchment area. The affected land was owned by the State of Sarawak.

The respondents were natives who lived on and cultivated the land affected by the Project since time immemorial. They complained that they were deprived of procedural fairness since they were not given an opportunity to make representations as to the impact of the Project on the environment as they were not given a copy of the EIA report prior to the implementation of the Project. By virtue of section 34A of the EQA read together with the 1987 Order, any person who intends to carry out a prescribed activity, such as this project, must submit an EIA report to the Director General of Environmental Quality and such report must be made available to the public to enable them to make comments. The respondents filed an application for a declaration that the EQA applied to the Project and therefore, the EIA report must be made public.

On the same day the application was filed, the 1987 Order was amended to exclude the operation of the 1987 Order to Sarawak. The respondents then applied to declare the amendments invalid. The High Court granted the declaration sought and the appellants appealed. It is noteworthy that the Sarawak Ordinance had no

36. [1997] 3 MLJ 23; [1997] 4 CLJ 253 CA.

such provision requiring the EIA report to be made public, nor any provision allowing the public to make comments on activities specified as prescribed activities.

The main issue in this case was whether the EQA applied to Sarawak since it had its own legislation on the same subject matter. The appellants argued that the EQA did not apply to the Project because the land in question belonged to Sarawak, with respect to which Parliament has no legislative authority, although the EQA expressly provided that it applied to the whole of Malaysia. Land, they argued, was a matter placed in List 2 of the Ninth Schedule which was within the power of the State Legislature to make laws. The respondents, on the other hand, argued that the Project came squarely within the purview of the EQA and the 1987 Order. They further argued that although Sarawak had its own law in the form of the Natural Resources Ordinance 1949, the appellants were under an obligation to comply with the more stringent requirements of the EQA.

The Court of Appeal held[37] that both Parliament and the Legislature of the State of Sarawak have concurrent power to make laws regulating the production, supply and distribution of power, including hydroelectric power. The "environment" upon which the Project will have an impact is land and water. Since the "environment" (land and water) in question came within the legislative and constitutional province of the State of Sarawak[38], that State has exclusive authority to regulate, by legislation, the use of it in such manner as it deems fit. Thus, the Court of Appeal held that the EQA did not apply to the environment that is the subject matter in the case.

On the point of the application of the EQA and the Sarawak Ordinance in Sarawak, Mokhtar Sidin JCA further held that power to legislate on environmental matters would depend on the

37. Per Gopal Sri Ram JCA (as he then was).

38. By virtue of Item 2(a) of List II and Item 13 of List IIIA of the Ninth Schedule to the Federal Constitution.

specific activity to which the environmental matter relates. If the activity complained of is in the State List, then the Sarawak Ordinance shall apply and if the activity complained of is in the Federal List, then the EQA shall apply. In the present case, the activity complained of is related to matters in the State List, thus the Sarawak Ordinance shall apply.

In the above case, it is noted that although the EQA had better provisions on the EIA in that it required the EIA to be made public and allowed the public to make comments, nonetheless the EQA was held to be inapplicable as the prescribed activity was in relation to a matter within the legislative competence of the State.

A similar issue, although unrelated to EIA, also arose in the case of *Malaysian Vermicelli Manufacturers (Melaka) Sdn Bhd v. PP*[39]. In this case, the appellant was convicted and sentenced by the Sessions Court on a charge of discharging effluent into inland waters (the Malacca river) without a licence contrary to Regulation 8(1)(b) of the Environmental Quality (Sewage and Industrial Effluents) Regulations, which constituted an offence under the EQA.

On appeal, the appellant contended that the applicability of the EQA was limited to matters enumerated in the Federal List of the Ninth Schedule to the Federal Constitution. Likewise, the power to make regulations under the EQA was also limited to matters in the Federal List. Since the Regulations under the EQA affected inland waters, this was a matter within the legislative competence of the State. The appellants contended that the Regulations were *ultra vires* and were not applicable to Malacca. They relied on the case of *Kajing Tubek* for support.

The High Court, in this case adopted a slightly different approach and distinguished *Kajing Tubek* and held that the vital question to be determined was what really was the true nature and character of section 25(1) of the EQA and the Regulations so that the class of subject to which they belong to could be ascertained.

39. [2001] 7 CLJ 74.

In this case, Ahmad Maarop JC (as he then was), having considered the Regulations in their entirety, held that the real object and purpose of the Regulations was the prevention, abatement and control of pollution with the aim of protecting, promoting, maintaining and enhancing public health. In his judgment, the Regulations were in pith and substance a legislation with respect to "public health, sanitation … and the prevention of diseases", an item in the Concurrent List[40], although the environment in this case (inland waters and land) were wholly within the State of Malacca.

The court also held that section 25 of the EQA was also a law with respect to "public health, sanitation and the prevention of diseases". Moreover, since the said section also created an offence and punishment in respect of legislation made by the Federal Government, it was also covered by item 4(h) in the Federal List, which is in respect to "creation of offences in respect of any matters included in the Federal List or dealt with by federal law". Therefore, the court held that the Regulations and section 25 of the EQA were applicable and enforceable in the State of Malacca and thus, the charge was valid.

The learned trial judge (as he then was) in the above case took the commendable approach of identifying the true object and purpose of the impugned Regulations and section 25 of the EQA. Having done so, the court concluded that the Regulations were, in essence, related to the prevention, abatement and control of pollution, whilst the true object and purpose of section 25 of the EQA were the prevention, abatement and control of pollution with the real aim of protecting, promoting, maintaining and enhancing public health, which are matters listed in the Concurrent List, to which Parliament and the State Legislature are equally competent to legislate. This was despite finding that the "environment" in question (inland waters and land) is within the powers of the State to legislate on.

40. Item 7 in List III of Ninth Schedule to the Federal Constitution.

Further, in *PP v. Ta Hsin Enterprise Sdn Bhd* [41], where a similar argument as in *Malaysian Vermicelli Manufacturers (Melaka) Sdn Bhd* was advanced, the High Court held that the subject matter in this case was concerned mainly with the discharge of waste into inland waters without a licence. In this respect, there was nothing to show that the power under the EQA had been ousted or precluded by any Order, and also there was no such provision on the matter in the Sarawak Ordinance. The court also held that the decision in *Kajing Tubek* was applicable in cases of construction of dams in the State of Sarawak. It went on further to hold that it was a fallacy to think that the inland waters in Sarawak is exclusive and that the EQA was not applicable in Sarawak. Consequently, the court found that the respondent's activity was within Sarawak but was not precluded from the operation of the EQA.

The above cases illustrate the difficulties in determining whether legislation on the environment comes within the legislative competence of the Federal Legislature or State Legislatures. This is more so, in light of the facts as discussed above, that the Federal Constitution does not specify "environment" as an item in either of the Federal List, the State List or the Concurrent List in the Ninth Schedule.

There are arguments in favour of and against matters relating to the environment being assigned to the purview of either the Federal Government or the State Government to legislate. In *Kajing Tubek*, at the High Court, it was argued by the defendants that since environmental impact was neither in the Federal List, the State List nor the Concurrent List, then by virtue of Article 77 of the Federal Constitution, Sarawak is entitled to lawfully legislate on such matters. Article 77 provides that the State Legislature shall have the power to legislate on matters not enumerated in any of the Lists.

41. [1998] 4 CLJ Supp 241.

An argument to support this contention is that environmental issues are by and large local in nature.[42] They are closely related to land, agriculture, farming, water and forests which are matters under the State's purview. Hence, the States and the local authorities are in a better position to identify environmental problems and to monitor them in their particular areas.[43] The close proximity between environmental issues at their source and local enforcement agencies eases enforcement functions. With regard to the EIA, preparation and approval of the EIA reports also require consultations with the local authorities and the State authorities.

However, States have limited sources of revenue.[44] This is perhaps the single biggest constraint to the States to enforce the provisions on the environment and the EIA in an effective manner. Effective enforcement requires sufficient manpower, finance, equipment and technical expertise and a lack of these resources is a major obstacle in the effective management of the environment, including the enforcement of statutory provisions on the EIA requirements.[45]

Conversely, the Federal Government has greater access to financial resources which in turn facilitates better enforcement, procurement of equipment and technical expertise. This is perhaps the most important factor in the argument in favour of the Federal Government being assigned the power to legislate on environmental matters.

In resolving this dilemma, Muhammad Yusuf Saleem argues that instead of relating environmental protection to the subjects in the Federal List, the State List and the Concurrent List, environmental issues should be treated as an independent subject and assigned through a constitutional amendment to the

42. *Muhammad Yusuf Saleem, supra*, see note 34, at p 204.

43. *Ibid*, p 205.

44. *Ibid.*

45. Sham Sani, *Environment and Development in Malaysia: Changing Concerns and Approaches,* p 91.

Concurrent List.[46] He is of the view that this will enhance the applicability of federal environmental laws without sacrificing local variations. This will also avoid unnecessary duplications and focus efforts towards achieving proper and effective management of environmental issues.[47] It also promotes greater cooperation between the Federal Government and the State Governments as to the steps that need to be taken. It is agreed that this is perhaps a viable resolution to this issue.

Be that as it may, an alternative option would be to specifically empower both Parliament and the State Legislature to make laws on the environment and to demarcate the specific areas within which the powers are to be exercised. The Federal Government can be empowered to make uniform laws on general matters, including on the EIA, which will be applicable to the whole of the Federation. This includes matters such as the appropriate standards which the stakeholders and industries ought to meet, requirements for the EIA reports, enforcement, investigations, offences and issues which transcend the borders of States. It can be achieved by inserting an item on "environment" in the Federal List and specifying the scope of its powers.

The details such as the process of the EIA reports, approvals and licensing, can be left to the States to make laws based on their special needs and local circumstances. Thus, duplication between the roles and functions of the Federal Government and the State Governments can be avoided. Both sides will be able to identify and appreciate the scope and extent of its powers. Besides, it will also promote enhanced cooperation between the federal agencies and the State agencies in enacting rules and regulations with the aim of preserving and conserving the environment. In this way, the strengths of both can be harnessed to ensure greater protection of the environment. Moreover, both parties would be clear as to the boundaries within which each operates.

46. *Muhammad Yusuf Saleem, supra*, see note 34, at p 209.

47. *Ibid.*

The proposed solution above may not entirely solve this issue. Problems may still occur where federal laws and State laws may be inconsistent or be in direct conflict with each other. Nevertheless, stipulating the boundaries within which each may legislate could be a starting point to minimise the inconsistencies in the application of the laws relating to environmental protection, such as the EIA requirements.

(ii) Circumvention Of Subsidiary Legislation Governing EIA

This issue discusses the problems caused by parties who willfully attempt to circumvent the subsidiary legislation governing the EIA requirements, thereby avoiding the need to submit EIA reports to the relevant authorities for their consideration prior to obtaining approval to undertake development projects. These are in direct relation to activities specified as prescribed activities under the 1987 Order.

The concern is that such circumvention renders the objective for requiring the EIA reports for activities which may have significant impact on the environment nugatory. The long term consequences of such circumvention in major projects which significantly impacts the environment could be disastrous. Two instances in recent times where such circumvention had occurred relate to –

(a) bauxite mining in Pahang; and

(b) coastal reclamation in Johor.

(a) Bauxite Mining In Pahang

Global demand for bauxite, which is largely used in aluminium production, is soaring, fueled by heavy demand from China. Eighteen months ago, there was hardly any bauxite mining activity in Malaysia. However, bauxite mining took off in Malaysia shortly after Indonesia, a top producer, banned mineral ore exports in January 2014 to encourage domestic metal processing, leaving major consumers in a supply crunch. Malaysian bauxite output in

2014 quadrupled to nearly 963,000 tonnes.[48] In 2015 alone, Malaysia's estimated exports were reported to be up to 20 million tonnes.[49]

Mining activities in Malaysia are regulated under the Mineral Development Act 1994 [Act 525]. Mining is also one of the "prescribed activities" which require an environmental impact assessment to be carried out under the EQA. However, the 1987 Order only required an EIA for a mining lease which covers a total area in excess of 250 hectares. Thus, when bauxite mining began in Pahang in 2014, most of the mining operations did not require an EIA to be carried out as the mines did not cover an area in excess of 250 hectares.

The poorly-regulated bauxite mining industry has taken a heavy toll on the local environment in what could easily be considered an environmental disaster.[50] The red dust laden with heavy metals and radioactive elements created during bauxite extraction washed into rivers, bogged up fields and blanketed towns with a rust-coloured layer of fallen sediment.[51]Sea waters around Kuantan had turned red from contamination, worrying residents and environmentalists.

Doctors had reported an increase in respiratory problems and skin irritations as direct results of exposure and samples from contaminated water had returned levels of lead, arsenic and mercury above legally acceptable standards. Citizens, meanwhile, had been dealing with sludge-covered roads and a garish

48. http://www.channelnews asia.comnews/asiapacific/malaysia-extends-ban-on/2679468.html.

49. *Infra,* n 50.

50. http://cleanmalaysia.com/2015/10/22/the-grim-long-term-outlook-of-bauxite-pollution-in-malaysia/, 22 October 2015.

51. *Ibid.*

reddening of the countryside.[52] These immediate consequences were serious enough to have prompted calls for better regulation or a temporary freeze of bauxite mining.

Amidst concerns over the hazardous dust and pollution as well as the adverse impact of bauxite mining on the environment and the surrounding population, the Malaysian Government imposed a three month moratorium on bauxite mining in Pahang effective from 15 January 2016. The three-month moratorium has since been extended three consecutive times until 31 December 2016. The purpose of the moratorium is to safeguard the environment and for the operators to clear the more than 3.5 million tonnes of stockpiles of bauxite.[53] It is also to enable the formulation of an effective standard operating procedure (SOP) to address issues related to bauxite mining activities in Pahang.

A 2008 sustainability report on most of Australia's bauxite mining corporations, which together were responsible for 66% of the world's total bauxite that year, revealed that 80% were certified for environmental management. These companies effectively minimize water and soil contamination, enable the land to support native plants after mining is complete, and keep displacement of local people to a minimum. Most importantly, the entire area used for mining is rehabilitated after use.[54]

It is observed that when such activities are regulated, the adverse impacts can be reduced and controlled. Malaysia ought to emulate the successful Australian experience to regulate her own bauxite mining industry.

Thus, should the current moratorium in place be lifted, bearing in mind the serious impact bauxite mining can cause to the environment and to the human population in the vicinity of the mines, it is hoped that the authorities would make it mandatory

52. *Ibid.*

53. *Supra*, n 48.

54. http://bauxite.world-aluminium.org/uploads/media/IV_Sustainable_Bx__Mining_Report.pdf.

for bauxite mine operators to submit the EIA reports before mining licences are issued and it is hoped that regulations governing bauxite mining are tightened.[55] It is also noted that the 2015 Order, which repealed the 1987 Order, has now made it mandatory for mining of minerals in new areas involving large scale operations as well as mining of minerals within or adjacent or near to environmentally sensitive areas. This may very well require bauxite operators to submit the EIA reports should the ban on bauxite mining be lifted in the future to avoid further critical damage to the environment.

(b) Coastal Reclamation In Johor

The Johor Economic Development Agency (Kumpulan Prasarana Rakyat Johor) and Country Garden Holdings, a Chinese property developer, have planned to jointly develop nearly 2,000 hectares of reclaimed land in the Straits of Johor over the next thirty years. The development, which involves creating a 2,000-hectare man-made island, is expected to be completed in thirty years' time. The project also includes a 49-hectare tourist hub and some recreational facilities. The reclamation works for the tourist hub began in early March 2014 and were expected to be completed by end of 2014.

The applicable law, section 34A of the EQA read together with the 1987 Order, requires that for coastal reclamation involving an area of 50 hectares or more, an EIA report must be submitted and approved before such activity can be carried out. In this case,

55. Such view was also expressed by United Nations University Professor of Environmental Health, Prof Dr Jamal Hisham Hashim, who urged the Pahang state government to make submission of EIA report mandatory for this activity. He also suggested that one way to reducing contamination from the ore, especially at stockpile sites, would be to move it away from water sources;

http://www.themalaymailonline.com/malaysia/article/bauxite-mining-polluting-pahangs-drinking-water-scientist-warns.

a detailed EIA was not initially carried out by the developer of the project on grounds that the reclamation work only covered an area of 49 hectares and in phases, one hectare shy of requiring the report.

In June 2014, the land reclamation work for the project was suspended pending the submission of a detailed EIA by the developer and discussions with the DOE.

The Johor State Government then issued the stop-work order on the reclamation works for the project pending the submission of a detailed EIA by the developer and discussions with the DOE.

However, subsequently, approval for this project was granted by the DOE after it was clarified that an EIA report for the tourist hub had been conducted because of concerns about its density even though the project was 49 hectares in size.[56]

The above is just one instance when coastal land reclamation developers circumvent the EIA requirements by subdividing parcels of land into smaller areas of less than 50 hectares. However, such circumventions appear to have been addressed in the 2015 Order, which repealed the 1987 Order. Under the 2015 Order, coastal reclamation involving an area of less than 50 hectares requires an EIA to be carried out but no public display or public comment of the EIA report is required. On the other hand, coastal reclamation involving an area of 50 hectares or more requires an EIA to be carried out and a report submitted to the relevant authorities. Such activity also requires public display and public comment of the EIA Report. Likewise, an EIA report is also required for coastal reclamation adjacent to environmentally sensitive areas and reclamation for man-made island, irrespective of its size. Such reclamation requires public display or public comment of the EIA report.

56. http://www.straitstimes.com/business/controversial-johor-strait-land-reclamation-project-forest-city-gets-the-go-ahead#sthash.Qc0K1sgJ.dpuf.

Another significant provision in the 2015 Order is subparagraph 3(4). It provides that notwithstanding the specifying of prescribed activities, any prescribed activity which has been divided into a size or quantum smaller than the size or quantum specified in the First and Second Schedules or any activity involving the increase in size or quantum resulting in such activity being categorised as a prescribed activity is also a prescribed activity, thus necessitating the carrying out of an EIA before its implementation. This is clearly a step in the right direction to curb circumvention of the law relating to EIA requirements.

However, notwithstanding the positive development brought about by the 2015 Order, the DOE still has to act on an ad-hoc basis to amend the said Order each time attempts are made to circumvent the law to ensure that EIAs are carried out for projects which have a significant effect on the environment. Perhaps what is needed is to vest wider powers on the Director General to require an EIA to be submitted for any activity not prescribed in the 2015 Order but which activity, in his opinion, has or is likely to have an adverse effect on the environment. Under the current scheme of the EQA, only persons intending to carry out any of the prescribed activities listed in the First and Second Schedules of the 2015 Order are required to submit EIA reports to the Director General of the DOE for his consideration.[57] The introduction of an omnibus clause as proposed would enable the Director General to act in a proactive manner rather than being reactive to attempts to circumvent the requirements of the law. The Director General could also be further empowered to require the person intending to carry out such activity to submit any other reports, including technical reports, necessary for his consideration.

57. See section 34A of the EQA.

On the challenges and issues relating to enforcement of the EIA in Malaysia, King and Olsen[58] observed that there is an increased decentralisation in overseeing and approving projects. This process becomes more decentralised as the States have the power to regulate and decide on project approvals while the EQA and the 1987 Order remain federal. Due to the increased decentralisation, environmental issues are increasingly falling under the jurisdictions of the States.

Land reclamation projects require approvals in the form of EIAs as well as from the State planning authorities. Therefore, it is argued that the EIA in this case often risks becoming a mere formality as it is commissioned after the respective State Executive Committee has approved the land change proposal.[59] Therefore, the Ministry or the DOE ought to review the current regulation and procedure and tighten the requirements for applications relating to land reclamation of such massive scale which carries a great impact on the environment.

Conclusion

Malaysia is defined as one of the twelve most ecologically diverse countries in the world and the degree of endemism that still survives is particularly high. Whilst 46% of Malaysia was still recorded as forested in 1994, the protected areas only represent 4.88%.[60] This underscores the need to protect and conserve the environment, including forests, of which one way is through proper implementation of the EIA requirements.

58. Peter King and Simon Hoiberg Olsen, 'Quick Study of EIA Practices in Some Asia-Pacific Countries and Beyond: Lessons for the Philippines?' (Institute For Global Environment Strategies, 2013).
59. *Ibid.*
60. Briffet *et al*, 'Environmental assessment in Malaysia: a means to an end or a new beginning?' in *Impact Assessment and Project Appraisal*, 221, at p 222; http//dx.doi.org/10.3152/147154604781765923.

The challenges associated with the EIA may be handled through the following ways:

1. creating awareness on its use and benefits;
2. ensuring there are well-defined legislation and regulations concerning the conduct of EIAs; and
3. effective monitoring and enforcement of EIA legislation.

EIAs should be properly managed to ensure the health and future sustainability of the environment and its resources. If managed effectively, EIAs can provide for a healthier environment and sustainable economic growth, benefitting both present and future generations. We need to take steps now to prevent degradation of the environment for the sake of our future generations and to leave a worthy legacy for our children. As a native American once said:

> We do not inherit the earth from our ancestors; we borrow it from our children.

Overfishing: The Need To Ensure Sustainable Fishing Activities Of The *Humphead Wrasse (Cheilinus Undulatus)**

by

Research Division, Attorney General's Chambers

Introduction

The Malaysian fisheries sector produces approximately 2,000,000 MT of fish annually and out of this seventy-five percent is harvested from the marine capture sector[1].

Between the years 1971-2007, Malaysia lost almost 92% of its fishery resources led by overfishing to satiate the demand for seafood[2]. From the data compiled by World Wide Fund from the year 2000 to 2009, the catch output[3] of a local fisherman has steadily declined in all States, at an average rate of 3.8 per cent per year.

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* The views expressed in this article are solely that of the Research Division, and do not, in any way, represent the official position or views of the Attorney General's Chambers, Malaysia.

1. Mohd Mansor Ismail & Ilmas Abdurofi, Comparative study of brackishwater species in Peninsular Malaysia (Institute of Agricultural and Food Policies Studies (IKDPM), University Putra Malaysia, 4(8), 2013) 145-151.
   Retrieved from http://scholarsresearchlibrary.com/ABR-vol4-iss8/ABR-2013-4-8-145-151.pdf
2. WWF-Malaysia Supports DOF's Enforcement of Bigger Mesh Size For Nets, Calls for Holistic Management for Fisheries (2013). Retrieved from http://www.wwf.org.my/?16585/WWF-Malaysia-Supports-DoFs—Enforcement-of-Bigger-Mesh-Size-For-Nets-Calls-for-Holistic-Management-for-Fisheries
3. Pathma Subramaniam, Overfishing, rampant demand driving fish prices, say environmentalists (Malay Mail Online, 1 May 2014). Retrieved from http://m.themalaymailonline.com/malaysia/article/overfishing-rampant-demand-driving-fish-prices-say-environmentalists#sthash.fAfEUr1M.dpuf

The trend in fish consumption among Malaysians is increasing, which is mainly based on Malaysian population data from the national consensus and data on national fish consumption. In 2010, an average Malaysian consumed more fish (54kg/year) compared to 20kg in 1970; a dramatic increase in demand for fish over four decades caused by rapid population growth[4].

As a result, many Malaysian fisheries resources are overfished and there is a need to transform fisheries management as acknowledged by the government, fishermen and consumers.[5] Malaysians are the biggest consumers of seafood in Southeast Asia and Malaysia's fishery resources have been over-exploited. The result is almost 90% of Malaysia's demersal (bottom-dwelling) fish stock dwindled in some fishing areas, due to unsustainable fishing practices, which pushed fishery resources to the verge of collapse and damaging the environment in the process[6].

The effects of overfishing can be devastating both environmentally and economically. This is evidently clear in the collapse of the Newfoundland Grand Banks cod fishery in Canada. The Newfoundland Grand Banks was famous for being a productive fishing ground for cod. Due to the effects of

4. Evelyn Teh, Fisheries in Malaysia: Can resources match demand?, (Maritime Institute of Malaysia. Online Commentary On Maritime Issues No.10/2012) 1. Retrieved from http://www.mima.gov.my/mima/wp-content/themes/twentyeleven/cms/uploads/seaview/10.et%20seaviews_final_updated%2019%20jul%202012.pdf
5. WWF Malaysia Strategy 2012-2020 (2012) 39. Retrieved from http://awsassets.wwf.org.my/downloads/wwfmy_strategic_document.pdf
6. Save our Seafood Guide in Sustainable Seafood Guide (WWF-Malaysia, 2009). Retrieved from http://www.wwf.org.my/media_and_information/publications_main/sustainable_seafood_guide/

overfishing, by 1992, the cod catch became extremely low and the government was forced to impose a moratorium to prohibit cod fishing activities for two years which was later on extended indefinitely, causing thousands to be out of work[7].

The impact caused by this moratorium is devastating not only ecologically but also in an economic sense because it affected not only fishermen, but also employees in processing plants, the wholesale and retail trades and boat construction. Following the ban, some Newfoundland communities shrank considerably as residents left to seek work in other provinces[8].

The ban itself ended a 500-year activity in Newfoundland and placed 30,000 people out of work. The Canadian Government had to introduce aid relief programs such as the Northern Cod Adjustment and Rehabilitation Program (NCARP) and The Atlantic Groundfish Strategy (TAGS). NCARP provides weekly payments to out-of-work fishermen based on their average unemployment insurance earnings between 1989 and 1991. NCARP participants were also required to enroll in training programs for work in other areas or accept early retirement packages. TAGS required applicants to retrain for work in other fields or accept retirement packages. It also provided participants with regular weekly payments; however the $1.9 billion programme ran out of funds in May 1998.[9]

7. The collapse of the Canadian Newfoundland cod fishery (Greenpeace International, 8 May 2009).
Retrieved from http://www.greenpeace.org/international/en/campaigns/oceans/seafood/understanding-the-problem/overfishing-history/cod-fishery-canadian/

8. Fisheries: The Lessons of The Grandbanks (The Observer). Retrieved from: http://www.oecdobserver.org/news/fullstory.php/aid/3526/Fisheries:_The_lessons_of_the_Grand_Banks.html

9. Jenny Higgins, Economic Impacts of The Cod Moratorium (Newfoundland and Labrador Heritage, 2008). Retrieved from: http://www.heritage.nf.ca/society/moratorium_impacts.html

The overfishing of one species of fish and the catastrophic results it caused shows that it is vital that steps be taken to curb the problem of overfishing before it adds up to a problem which could take years to overcome.

Problem Statement

One of the species identified to be overfished in Malaysia[10] is the *Humphead Wrasse (Cheilinus Undulatus)* from the family of Labridae[11]. The "Save our Seafood" campaign in Malaysia started by WWF-Malaysia and the Malaysian Nature Society[12] has placed the species under the category of "unsustainable and overfished" fisheries. In Malaysia, the *Humphead Wrasse* population has decreased by 99.91% since 1974 up until the year 2004[13].

The species is naturally rare, with recorded maximum adult density of not more than twenty fish per 10,000 m^2. The population has dropped by 50% over the course of 30 years[14].

Applicable Legislation In Malaysia

The following is a list of legislation governing fishing activities in Malaysia at the Federal level:

10. *Save our Seafood Guide, supra* n 6.
11. The IUCN Redlist of Threatened Species (Cheilinus Undulatus, 2004).
    Retrieved from: http://www.iucnredlist.org/details/4592/0
12. *Save our Seafood Guide, supra* n 6.
13. Petition to list the Humphead Wrasse (Cheilinus Undulatus) under the Endangered Species Act (2012). Petition Submitted to the U.S. Secretary of Commerce, National Oceanic and Atmospheric Administration and the National Marine Fisheries Service p 8.
    Retrieved from: http://www.nmfs.noaa.gov/pr/species/petitions/humphead_wrasse_petition_10.29.12.pdf
14. WWF-Global *Humphead Wrasse.*
    Retrieved from: http://wwf.panda.org/what_we_do/endangered_species/humphead_wrasse/

– the Fisheries Act 1985 [Act 317];

– the International Trade In Endangered Species Act 2008 [Act 686];

– the Fisheries (Prohibition of Method of Fishing) Regulations 1980 (P.U.(A) 314/1980);

– the Fisheries (Prohibition of Method of Fishing) (Amendment) Regulations 1990 (P.U.(A) 32/1990);

– the Fisheries (Closed Season to Catch Kerapu Fry) Regulations 1996 (P.U.(A) 619/1996);

– the Fisheries (Prohibition of Method of Fishing For Kerapu Fry) Regulations 1996 (P.U.(A) 620/1996);

– the Fisheries (Prohibited Areas) (Rantau Abang) Regulations 1991 (P.U.(A) 277/1991);

– the Fisheries (Prohibited Areas) Regulations 1994 (P.U.(A) 402/1994); and

– the Fisheries (Control of Endangered Species of Fish) Regulations 1999 (P.U.(A) 409/1999).

Fishing activities are currently governed under the Fisheries Act 1985 but there is no specific provision which regulates the fishing of the *Humphead Wrasse*. The Act provides that the Minister[15] may make regulations specifically or generally for the proper conservation, development, and management of maritime and estuarine fishing and fisheries in Malaysian fisheries waters. Several regulations have been enacted by the Minister exercising the powers conferred under the Act providing for the prohibition[16]

15. *Power of Minister to make Regulations,* Section 61 of the Fisheries Act 1985 (Act 317).

16. Fisheries (Prohibition of Method of Fishing) Regulations 1980 (P.U.(A) 314/1980) and amended by Fisheries (Prohibition of Method of Fishing) (Amendment) Regulations 1990 (P.U.(A) 32/1990).

of certain methods of fishing and prohibition on the catching of the Kerapu fry[17] during certain months of the year and within the fisheries waters in the states of Kelantan and Terengganu. There are also regulations enacted to provide for specific areas where the killing or capturing of fish are prohibited[18]. The prohibition of fishing activities without the written permission of the Director General of certain endangered species[19] under the dugong, dolphin, whale and whale shark groups are also provided under another regulation, although sadly, the list of species protected does not include the *Humphead Wrasse*.

However, Malaysia has made the export and import of certain species, which includes the *Humphead Wrasse*, an offence without a permit[20]. The International Trade In Endangered Species Act 2008 (ITESA) implements the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) to which Malaysia is a party. The Convention acts as an international agreement to ensure that international trade in specimens of endangered animals and plants does not threaten their survival. The *Humphead Wrasse* is a species listed in Appendix II of the Convention, necessitating the control of export and import of the species internationally. The listing is binding on signatories or countries providing for animals traded internationally to be part

17. Fisheries (Closed Season to Catch Kerapu Fry) Regulations 1996 (P.U.(A) 619/1996).
18. Fisheries (Prohibited Areas) (Rantau Abang) Regulations 1991 (P.U.(A) 277/1991) and Fisheries (Prohibited Areas) Regulations 1994 (P.U.(A) 402/1994).
19. Fisheries (Control of Endangered Species of Fish) Regulations 1999 (P.U.(A) 409/1999).
20. *Import and Export,* Section 10 of the International Trade In Endangered Species Act 2008 [Act 686].

of a sustainable management plan.[21] This Convention was implemented through the ITESA but the ITESA regulates only import and export activities of the Humphead Wrasse. There is a need for a regulation to specifically control the fishing activity of the *Humphead Wrasse*.

Review On The Status Of The Humphead Wrasse

International And Domestic Trade Of The Humphead Wrasse

The *Humphead Wrasse* is a species which is targeted for both international and domestic trade.[22] This species is a small but important part of trade in live reef food fish and the leading suppliers of the *Humphead Wrasse* are Indonesia, the Philippines, China, Australia and Malaysia. In addition to its role in the live reef food fish trade, the *Humphead Wrasse* is valued for several reasons, especially for local food and its role in dive tourism. Illegal trade in this species appears to be intense in relation to Indonesia, Malaysia and the Philippines[23].

The fish was reported as a luxurious dish fetching RM250 to RM300 per kilogram[24]. Seafood restaurants in Sabah are reported to have served and continue to serve this delicacy with an average

21. Yvonne Sadovy, *Humphead wrasse and illegal, unreported and unregulated fishing* (Division of Ecology and Biodiversity, University of Hong Kong, China); IUCN Groupers and Wrasses Specialist Group, SPC Live Reef Fish Information Bulletin #19 (2010) 1.
Retrieved from http://www.spc.int/DigitalLibrary/Doc/FAME/InfoBull/LRF/19/LRF19_19_Sadovy.pdf
22. Robert Gillett, *Monitoring and Management of the Humphead Wrasse* (Cheilinus Undulatus, 2010); Consultant Lami, Fiji *Food and Algriculture Organisation of The United Nations, Rome.*
Retrieved from http://www.fao.org/docrep/013/i1707e/i1707e00.pdf
23. *Monitoring and Management of the Humphead Wrasse* (Cheilinus Undulatus) *ibid* p 9.
24. Tan Cheng Li, *Reef Fish Face Extinction As Many End Up On Dinner Tables* (The Star, 8 April 2008).
Retrieved from http://www.thestar.com.my/story?file=%2f2008%2f4%2f8%2flifefocus%2f20843352&

pricing of RM200 per kg. The sale of such species does not attract any legal repercussion since it is unregulated[25]. It has been alleged that tourists from Hong Kong and China are known to feast on such delicacies and have flocked to seafood restaurants in Sabah to enjoy this species as it is cheaper compared to the price in their countries[26].

Risk Of Extinction Of The *Humphead Wrasse*

This species has been listed as threatened and endangered under the International Union for Conservation of Nature (IUCN)[27] Red List of Threatened Species of Flora and Fauna[28]. Threatened species are those facing threats to their survival and running the risk of extinction. The classification of threatened species is divided into three different categories which are "vulnerable", "endangered" and "critically endangered". A species categorised as "vulnerable" means the species is considered to be facing a high risk of extinction in the wild, "endangered" means the

25. Lawrence Kissol, Marine Resources Management Branch Sabah Department of Fisheries (Personal Communication, 20 November 2014).
26. *Reef Fish Face Extinction As Many End Up On Dinner Tables supra* n24.
27. The IUCN is a professional global conservation network which concerned with sustainable development and the environment. It has more than 1,200 member organizations which include government and non-governmental organizations. It consists of voluntary scientists and experts, grouped in six Commissions in 160 countries. The Malaysian Department of Wildlife and National Parks is one of the governmental agencies which is a member of the IUCN. The Red List of the IUCN provides the conservation status and distribution information of plants and animals on a global scale. Species evaluated are placed in categories of vulnerable, endangered or extinct. The assessments are done by special groups of the IUCN. See IUCN "About IUCN: What is IUCN?". Retrieved from http://www.iucn.org/about/
28. *Cheilinus Undulatus supra* n11.

species is considered to be facing a very high risk of extinction in the wild and "critically endangered" means the species is considered to be facing an extremely high risk of extinction in the wild[29].

It is also listed in Appendix II of the CITES. The Convention is an international agreement between member countries with the objective of ensuring that international trade in specimens of wild animals and plants does not threaten their survival[30]. The CITES subjects international trade in specimens of selected species to certain controls. All import, export, re-export and introduction from the sea of species covered by the Convention has to be authorised through a licensing system. Species listed in Appendix II of the Convention are not necessarily threatened with extinction but in which trade must be controlled in order to ensure their survival. International trade in specimens of Appendix-II species may be authorized by the granting of an export permit or re-export certificate[31].

Malaysia is a party to the Convention and implements its obligations through the ITESA which provides for the requirement of a permit for the import and export of species under the Third Schedule thereof. The *Humphead Wrasse* (*Cheilinus Undulatus*) is a species under the Third Schedule of the ITESA necessitating the requirement of a permit for the species to be exported out or imported into Malaysia[32]. The listing of the *Humphead Wrasse* by the Malaysian authorities is perfectly consistent with its obligations under the CITES.

29. WWF IUCN levels of threatened species. Retrieved from: http://www.wwf.org.au/our_work/saving_the_natural_world/wildlife_and_habitats/iucn_levels_of_threatened_species/
30. What is CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973).
    Retrieved from http://cites.org/eng/disc/what.php
31. The CITES Appendices. Retrieved from http://www.cites.org/eng/app/index.php
32. Import and Export, Section 10 of the International Trade In Endangered Species Act 2008 [Act 686].

It is noted that the ITESA only regulates international trade. The local trade of the fish remains unregulated. A quota system was implemented and it is determined based on the result of a study known as a "Non-Detrimental Finding" (NDF). This study was done on the *Humphead Wrasse* in 2008 and the recommended quota was zero, hence the total ban on international trade of the species. The zero quota was set due to the dwindling population of the fish and there is a possibility the survival of the fish will be substantially affected and the fish will face extinction if the international trade of the fish is continued. The quota depends on the level of increase of the Humphead Wrasse population. This is done through the NDF study which, however, has not been carried out by the Department of Fisheries, Sabah, as of now.

The species may be traded again if the population returns to a level where the CITES no longer lists it as endangered or if the species is successfully managed in hatchery centres to full maturity for the purposes of trade.[33]

Lack Of Data On Local Consumption

Although Malaysia has regulated the import and export of the species, data is unavailable for domestic trade of the fish[34]. This is attributed to the fact that the fish itself is legally allowed to be caught or fished and marketed for purposes of consumption. The Humphead Wrasse is prized as a delicacy and Hong Kong is the largest known consumer market for this species, although upscale eateries in Malaysia, Singapore and mainland China are

33. Lawrence Kissol, Marine Resources Management Branch, Sabah Department of Fisheries (Personal Communication, 20 November 2014).

34. *Monitoring and Management of the Humphead Wrasse, Cheilinus Undulatus supra* n 22.

also known to offer this delicacy[35]. The Department of Fisheries, Sabah, does not, unfortunately, keep any data or statistics on the local consumption of the *Humphead Wrasse* in Sabah[36].

Current Protection Measures

In 2009, the Sabah Fisheries Department announced its intention to ban the *Humphead Wrasse* export from Sabah and this was formally enforced on 1 January 2010[37]. The Sabah State Minister of Agriculture and Food Industry, Datuk Seri Panglima Hj. Yahya Hussin, on 12 October 2010, launched the "Live Reef Fish Food Trade Regional Exchange Workshop" and stated that the export of *Humphead Wrasse* has been banned in Sabah and the next step was to stop all exports and to control the exploitation of such species[38].

The ITESA provides that a "Management Authority" has the power to issue permits and licences as well as allow registration thereunder[39]. In Sabah, the Sabah Fisheries Department has

35. Endangered coral reef fish seized in Indonesia – WWF Singapore (2006, July 12).
Retrieved from http://www.wwf.sg/?75760/endangered-coral-reef-fish-seized-in-indonesia.

36. Lawrence Kissol, Marine Resources Management Branch, Sabah Department of Fisheries (Personal Communication, 20 November 2014).

37. Kenneth Kassem & Irwin Wong, *Report on Humphead Wrasse; Buy-Back and Release Programme in Sabah, Malaysia* (A publication supporting the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF), 2013) 10-11. Retrieved from:
http://www.coraltriangleinitiative.org/sites/default/files/resources/16_Humphead%20Wrasse%20Buy%20Back%20and%20Release%20Report.pdf

38. Government Committed to Making Local Aquaculture Industry Sustainable (Sabah Times, 13 October 2010). Retrieved from: http://www.newsabahtimes.com.my/nstweb/fullstory/43250

39. Section 7(2) of the International Trade in Endangered Species Act 2008 [Act 686].

jurisdiction as to the management authority over fish, coral and marine plants of the State[40]. As stated above, the Department implemented a ban in 2010 on the export of the Humphead Wrasse[41]. The export of the Humphead Wrasse required a permit[42] applied to and issued by the Department, but which was no longer issued for this species after the ban in 2010.

Even though there is a ban on export, it has been alleged that the challenge faced is on illegal and unreported exports in Malaysia[43]. In fact, in October 2010, the Fisheries Department of Sabah managed to foil an attempt to illegally transport six types of protected marine fish species, including the *Humphead Wrasse,* which are banned from export to Hong Kong through the Tawau Airport[44]. This proves that there are prevalent attempts to try to export the species, even though there is a zero quota placed on the export of the Humphead Wrasse.

40. First Schedule of Act 686.

41. Lawrence Kisol, Spesis Haiwan dan Tumbuhan Marin di Sabah. Seminar Familiarisation Mengenai CITES dan Akta 686 (Perdagangan Antarabangsa Spesies Terancam) kepada Pegawai Kastam (Department of Fisheries in Sabah, 2010).

42. Section 16(2) of Act 686.

43. Yvonne Sadovy, *Humphead Wrasse* and Illegal, Unreported and Unregulated Fishing (Division of Ecology and Biodiversity, University of Hong Kong, China); IUCN Groupers and Wrasses Specialist Group, SPC Live Reef Fish Information Bulletin #19 (August 2010) p 2. Retrieved from: http://www.spc.int/DigitalLibrary/Doc/FAME/InfoBull/LRF/19/LRF19_19_Sadovy.pdf

44. Jabatan Perikanan Rampas Enam Spesies Ikan Dilindungi Cuba Diseludup Ke Hong Kong (My Metro, 23 October 2014). Retrieved from: http://www.hmetro.com.my/articlesJabatanPerikananrampasenamspesiesikandilindungicubadiseludupkeHongKong/Article

Lessons From Other Countries

Legal Protection For The Humphead Wrasse (Australia)

In Queensland, Australia, the *Humphead Wrasse (Cheilinus Undulatus)* is a protected or "no-take" species[45] under a subsidiary legislation, the Fisheries Regulations 2008, read together with the Queensland Fisheries (Coral Reef Fin Fish) Management Plan 2003. These are subsidiary legislation under the State parent Act, which is the Queensland Fisheries Act 1994. The species is protected from all commercial and recreational fishing.

The Fisheries Act 1994 provides that a fishery declaration may be made to regulate the taking, purchase, sale, possession or use of particular fish[46]. The subsidiary legislation under the parent Act, the Fisheries Regulations 2008, declares the *Humphead Wrasse* as a species which is regulated under Part 2, while Part 3 and Schedule 2 of the Regulations provides for the way the species is regulated. Under Schedule 2 of the Regulations, the *Humphead Wrasse* is a "no-take species", and therefore it is an offence to take or possess the fish.

The mortality rate of the *Humphead Wrasse* is estimated to be much lower in Queensland, Australia, after the implementation of the Regulations and the 2003 Management Plan which protect the fish from all commercial and recreational fishing[47].

It is to be noted that in places where a certain degree of protection is afforded to the species, the condition of the local stocks appear to be reasonable.[48] One of the examples is

45. *Management of Humphead Maori Wrasse (Cheilinus undulatus) in the Coral Sea Fishery* (Australian Government, Australian Fishery Management Authority). Retrieved from: www.afma.gov.au
46. Section 37(2) of the Fisheries Act 1994.
47. *Management of Humphead Maori Wrasse (Cheilinus undulatus) in the Coral Sea Fishery* (Australian Government, Australian Fishery Management Authority). Retrieved from: www.afma.gov.au
48. *Monitoring and Management of the Humphead Wrasse* (Cheilinus Undulatus, 2010) *supra* n 22.

Australia where State legislation such as the Fisheries Regulations 2008 and the Queensland Fisheries (Coral Reef Fin Fish) Management Plan 2003 were enacted.

Schedule 2 to the Regulations provides that the *Humphead Wrasse* is a species which is regulated and the prohibited activities involving the fish are "taking or possessing the fish". The Regulations themselves are particularly extensive providing for the control of many different types of fish species.

Legal Protection For Cod Fish (Canada)

Reference can also be made to the moratorium on Cod Fish in the Canadian Newfoundland and Labrador. The Minister of Fisheries and Oceans at the time, the Honorable John C. Crosbie, announced a two-year moratorium on cod fishing in a public address to the people in Newfoundland and Labrador. The closure of the commercial northern cod fishery on 2 July 1992 caused the layoff of 20,000 fishermen and plant workers[49]. Fishing activities in Canada is regulated through licensing[50] under the Regulations, which is a subsidiary legislation under the Fisheries Act (R.S.C., 1985, c. F-14). Since the moratorium was put in place, commercial fishing activity of the cod fish in Newfoundland and Labrador has been banned indefinitely until now.

After more than twenty years of the ban, the cod stock in the Newfoundland and Labrador area has seen some improvements, *albeit* slowly[51]. George Rose, Director of the Centre for Fisheries

49. Crosbie calls cod moratorium his hardest political moment (CBC News, 27 June 2012). Retrieved from: http://www.cbc.ca/news/canada/newfoundland-labrador/crosbie-calls-cod-moratorium-his-hardest-political-moment-1.1214175

50. Section 13 of the Atlantic Fishery Regulations 1985.

51. Michael Macdonald, Cod Fishing In Newfoundland: After 20 Year Moratorium, Signs Of Recovery (The Huffington Post, 30 June 2012) The Canadian Press. Retrieved from: http://www.huffingtonpost.ca/2012/06/30/cod-newfoundland-fishing-recovery_n_1639540.html

Ecosystems Research at Memorial University in St. John's, said recent research indicates that the cod are living longer and getting bigger, thanks mainly to warmer water temperatures. However, the moratorium has yet to be lifted due to the slow recovery. Thus, it is argued that overfishing of a fish species needs to be countered by way of legislative action, as it will stop the taking of the fish and allow recovery of its population, although it may be a slow process.

Conclusions And Recommendations

Based on the research carried out, it could be concluded that despite being recognized as an endangered species, the existing legislation in Malaysia only regulates the international trade of the *Humphead Wrasse (Cheilinus Undulatus)*, with no regulation on its local trade and consumption. The popularity of the species as a prized delicacy further threatens its population. Therefore, effective measures are needed to ensure the continuity of the *Humphead Wrasse*'s survival.

As noted above, there is at least one country that has enacted legal protection for the *Humphead Wrasse*. The lesson gained from Canada's experience following the collapse of the population of codfish is also illustrative of what could happen to the *Humphead Wrasse*. Based on these findings, it is recommended that the following actions be taken in Malaysia to protect the population and survival of the *Humphead Wrasse*:

(a) a similar approach as taken by Australia in making *Humphead Wrasse* a "no-take species" can be implemented here. By virtue of the Fisheries (Control of Endangered Species of Fish) Regulations 1999 legislated under section 61 of the Fisheries Act 1985, the *Humphead Wrasse* may be listed as an endangered species under the Schedule to the Regulations. Rule 2 of the Regulations provides that endangered species of fish listed under the Schedule is prohibited from being

disturbed, harassed, taken, sold, or exported. The protection accorded will mirror the approach taken in Australia, offering a thorough ban on the taking of the fish locally; and

(b) collaborating with the Sabah Department of Fisheries in conducting the NDF study as discussed above in order to track the population recovery of the species.