

CHAPTER ONE

INTRODUCTION

The wealth of literature on the importance of conserving biological diversity and resonating calls therein for better regulation for conservation serves as the impetus for this research. This research delves on the challenges that lie in crafting an instrument of regulation that will aid biodiversity conservation, focused on Malaysia, which has been recognised as one of the 17 mega diverse countries in the world¹.

It will look at the options to develop an integrative statutory framework encapsulated in a single instrument that will help complement the existing statutory regime on biodiversity conservation, taking into account the challenges in statutory uniformity and integration. In addition, it will also take into account the need for an instrument that not only serves the need to protect biological diversity but also looks at balancing the use of components of and systems linked to biological diversity stemming from a complex Federal-State government relationship.

The basis of the research lies with statements that reiterate national concerns captured in previous Malaysian National Development Plans, raised in the National Policy on Biodiversity 1996 (“NBP”) ². Particular emphasis is given to highlighted deficiencies that have marred the effective conservation and management of biological diversity.

¹ Williams, J., Read, C., Norton, A., Dovers, S., Burgman, M., Proctor, W. and Anderson, H., *Biodiversity*, Australia State of the Environment Report 2001 (Theme Report), CSIRO, Publishing on behalf of the Department of the Environment and Heritage, Canberra. See page 13.

² Malaysia, 1996. National Policy on Biological Diversity 1996.

The NBP lists three linked aspects that hamper conservation:

- The absence of an integrative approach and consideration for the overall objective of biological diversity conservation;
- Lack of a comprehensive coverage of issues; and
- Jurisdictional conflict between Federal and State Governments that have led to non-uniform implementation between States.

Crucial to addressing these obstacles, the NBP calls for a re-look at laws and see how uniformity can be promoted.

The link between and importance of biodiversity to human well-being too has been well documented in the Millennium Ecosystems Assessment Synthesis Report on Ecosystems and Human Well Being³, that in short sums up the important role biodiversity plays in ecosystem functions that provide supporting, provisioning, regulating, and cultural services, which are essential for human well-being. In addition, Malaysia's commitment to various multilateral environmental agreements has brought to light the need for harmonisation between national priorities, interests and capacity with global calls for stricter conservation efforts⁴.

³ Millennium Ecosystems Assessment, 2005. *Ecosystems and Human Well-Being: Biodiversity Synthesis*. World Resources Institute, Washington, D.C.

⁴ For example for the 'International Day for Biological Diversity 22 May 2007', the Secretariat to the Convention on Biological Diversity ("CBD") announced that the focus would be on Biodiversity and Climate Change. Since biodiversity is threatened by human induced climate change likewise biodiversity resources can reduce the impacts of climate change, calls have been made to focus on conservation of biodiversity sensitive to climate change, habitats to facilitate long term adaptations, improve understanding of climate change and fully integrate biodiversity considerations into mitigation and adaptation plans. (Source: <http://www.cbd.int/programmes/outreach/awareness/biodiv-day-2007.shtml>. Last accessed: 1st June 2007). These are just some of the focus and targets set by the CBD, which then manifests itself into programmes of work that are adopted and reviewed by the Conference of Parties (COP) of the CBD. As a party to the CBD, Malaysia is committed to the obligations set out by the CBD, though the language used in negotiations are couched to persuade countries to comply rather than force countries to comply with terms, provisions and targets adopted at COP.

As stated earlier the role played by biodiversity in the nation's development is evident in the various policies since 1957, particularly those setting directions for the use of natural resources, such as forests for logging in particular, to help boost socio-economic development. As early as the 1970's in the Third Malaysia Plan (1976-1980), caution on the impact of resource exploitation was outlined an overall environmental policy that amongst other takes into account the "need to preserve the country's unique and diverse natural heritage all of which contribute to the quality of life". The ultimate aim then was, through a close working relationship between the Federal and State Governments ensure that "all of man's activities are in balance with his environment".

This constitutional issue together with the contextualisation of conservation and biological diversity, the multiple policy objectives and statutes that implement various government objectives peg the arguments for statutory integration. The points flagged in the NBP that states that it is the sectoral nature of biodiversity related law and the Federal-State relationship, which has hampered biodiversity conservation, and the assumption that a uniformed statute would resolve issues plaguing biodiversity conservation is uncontested and serves as a departure point of this research. The thesis question will revolve on whether it is possible to develop an integrative statutory framework that will introduce uniformity. This will the lead to the determination of options available to structure a single comprehensive statutory framework that sets out a common objective, consolidates different approaches across sectors, and introduce uniformity for biodiversity management and conservation.

A profile of the existing biodiversity statutory regime and the contextualisation of the needs for biodiversity conservation in addition to lessons learnt from the Australian

Environment Protection and Biodiversity Conservation Act 1999 (EPBCA 1999) will provide the inputs required in facilitating a convergence of existing statutes and fill in gaps towards creating a preliminary integrative statutory framework suited to Malaysia. A preliminary framework will weave in the overall objective of biodiversity conservation as premised nationally and promoted globally, pegged on a central concern that biodiversity is central to supporting the ecological system that in turn supports man. This would be a departure in the sense that biodiversity will not only be seen for the tangible components (flora, fauna and micro-organisms) but for the functions and services it provides such as water filtration, catchment protection, hazard mitigation in addition to health and food security.

1.1 OBJECTIVE

The assumptions laid out in the NBP are uncontested for the purposes of this research, and lies hinged on statements contained in the NBP⁵, i.e.:

- there is no single comprehensive legislation in Malaysia which relates to biological diversity conservation and management as a whole;
- the existing legislative framework is sectoral, to an extent restrictive causing some deficiencies, due to an absence of an integrative approach across sectors, lack of consideration of the overall objectives of conservation and comprehensive coverage of biological diversity issues; and
- The provisions of the Federal Constitution of Malaysia 1957 (“Federal Constitution”) have unwittingly led to legislative non-uniformity.

The hypothesis therefore is to show that an integrative statutory framework that promotes uniformity to address the flaw in the current biodiversity conservation

⁵ National Biodiversity Policy 1998, pgs 19-20

statutory regime will ensure effective management and conservation of biodiversity. The focus here will be on statutory construction, and the exercise of statutory deconstruction of the present statutory regime focuses on aspects related to inputs and statutory framework. It is a mechanistic study of both deconstruction and construction of a statute.

The fundamental objective of this research is to prove that it is possible to develop an integrative statutory framework for the conservation of biological diversity; bearing in mind the delicate balance that exists in the Federal Constitution relating to Federal–State legislative and executive reach in Malaysia. In order to do this, carrying out the following would be necessary:

- Profiling the current needs to facilitate biological diversity conservation, sustainable use of its resources and fair and equitable benefit sharing of genetic resources provided by the law, with emphasis on what and how; and
- Studying the feasibility and options for an integrative statutory framework for biological diversity conservation, looking at a comparable statutory framework from within the 17-mega diverse countries in the world, taking into account the need to look for a comparable framework that is based on a federated system of government as well.

The purposive approach in statutory interpretation will be the method employed in the analysis of existing statutes related to biodiversity, conservation and acts pertaining to or impacting on the conservation of biodiversity to provide a clearer landscape of what exists, the extent of their objective and scope and the fit (or mismatch) with the existing national policy on biodiversity. The focusing on statutory law only and not

other sources of law is by design as this thesis approaches the law from the perspective of legal positivism⁶.

In addition, a comparative study is employed, looking at the Australian EPCBA 1999, to understand the way taken by Australia in balancing the interests of the federal and state towards achieving an overarching goal of conservation. The EPBCA 1999 will serve as the comparable framework, as the similarities between the constitutional provisions of Australia and Malaysia provides a learning backdrop, from which lessons can be gleaned to help structure an integrative statutory framework.

Lastly, to fulfil the research objective, in structuring an integrative statutory framework, elements of statutory drafting will have to be looked at. The drafting of statutes, the rationale and methods that are necessary towards piecing together objectives, mandates, scope, means and measures to be implemented and enforced will be briefly looked to ensure that in framing the integrative statutory framework, the fundamentals of drafting are incorporated.

1.2 SCOPE

Taking off from a legal positivism stand point, in that the study remains focused on law as it is posited⁷. Taking cue from Hart (1994), law here will be confined to statute and the conception of rules, its embodiments with ‘a central core of undisputed meaning’⁸. Here the statutes are studied as it is posited, in that:

⁶ Finnis J., 2002. *Natural Law: The Classical Tradition*. In Coleman J. L. & Shapiro S. (eds), *Jurisprudence and Philosophy of Law*. Oxford University Press 2002; Coleman J. L., 2002. *Negative and Positive Positivism*. In Patterson D. (ed.) *Philosophy of Law and Legal Theory: An anthology*. Blackwell Publishing 2002; Coleman J. L. & Leiter B., 1996. “Legal Positivism”. In Patterson D. (ed.), *A Companion to Philosophy of Law and Legal Theory*. Blackwell 1996; and Hart H. L. A., 1994. *The Concept of Law* (Second Edition). Oxford University Press, 1994 were referred.

⁷ Coleman J L & Shapiro S (eds), *Jurisprudence and Philosophy of Law*, Oxford University Press 2002; Patterson D (ed.) *Philosophy of Law and Legal Theory: An anthology*, Blackwell Publishing 2002; Patterson D (ed.), *A Companion to Philosophy of Law and Legal Theory*, Blackwell 1996; and Hart H L A, *The Concept of Law* (Second Edition), Oxford University Press, 1994 would form part of the source from which arguments for positivism will be drawn from to limit the scope of the study to the study of the statute, exclusive of morality, judicial expectations and social theory. It would then provide a platform to bridge legal theory to statutory interpretation.

⁸ Hart, HLA, *The Concept of Law* (2nd Edition), Oxford University Press 2004. See page 11.

“..The state of law should be studied as if it were a set of standards originated exclusively by conventions, commands or other such social facts⁹”.

Positivism here is taken in a moderate sense¹⁰.

A context of what encapsulates biological diversity and conservation based on literature review, taking into account national context for biodiversity and conservation as well as current trends in biodiversity conservation internationally will be made to help design a checklist for inputs necessary in an integrative statutory framework. International legal sources will be limited to United Nations recognised multilateral agreements relevant to biodiversity.

The bulk of the thesis will focus on the issue of legal mandate, as the discussion on what is meant by biodiversity and conservation reveal that the scope and the use of term is broad. Malaysia is made up of a federation of states and settlements. In 1957 the Malays States of Johor, Pahang, Negeri Sembilan, Selangor, Kedah, Perlis, Kelantan, Terengganu, Perak as well as the Settlements of Penang¹¹, came together and through the Malaya Agreement of 1957 formed the Federation of Malaya, establishing the supremacy of the Constitution of Persekutuan Tanah Melayu¹². The subsequent Malaysia Agreement 1963, which saw the inclusion of the states of Sabah, Sarawak and Singapore (which left the Federation in 1965), further amplified the

⁹ Finnis J , “*On the incoherence of legal positivism*” in Patterson D (ed.) *Philosophy of Law and Legal Theory: An anthology*, Blackwell Publishing 2002.

¹⁰ Reference and discussion will also include matters raised in the literature review in Chapter 2, including Coyle, S., *Positivism, Idealism and the Rule of Law*, OJLS 2006 26 (257); Greenberg, M., *How Facts Make Law*, Legal Theory 10 (2004) 157-198; and Patterson, D.M., Dworkin on the Semantics of Legal and Political Concepts, OJLS 2006 26 (545).

¹¹ As provided for in the Malaya Agreement of 1957. The version referred to is the one contained in the book produced by Institut Terjemahan Negara Malaysia Berhad, entitled *Perjanjian& Dokumen Lama Malaysia (Old Treaties and Documents of Malaysia)* 1791-1965. Institut Terjemahan Negara Malaysia Berhad, 2008. *Perjanjian& Dokumen Lama Malaysia (Old Treaties and Documents of Malaysia)* 1791-196. ITNM, Malaysia. 239 pages. See pages 206-213.

¹² Ibid fn 11 at pages 216 and 217.

supremacy of the Federal Constitution (“Constitution”) and emphasis of State sovereignty¹³.

The dissertation will begin with understanding the prerequisites of biodiversity conservation, then move to the root of all statutes in Malaysia, i.e. the Constitution. It will focus on the position of the Constitution and biodiversity, followed by a profile of the existing statutory regime that relates to biodiversity conservation. The discussion will focus on the assumed silent stance the Constitution ‘adopts’ in relation to biodiversity, in addition to looking at the different components of biodiversity¹⁴ that may prevail either directly or indirectly within the Constitution. It will also look at the carefully hidden nod to conservation cused within the ambits of Federal executive jurisdiction¹⁵.

Statutes applicable to Malaysia that are related or can be related to biological resources, biodiversity, conservation and all acts or activities related up to June 2010 would be listed. Draft statutes where necessary will be referred and footnoted to amplify a point but will not be included in the analysis. Given Malaysia’s federated system of governance, the review will be divided to statutes applicable to Peninsular Malaysia, Sabah and Sarawak, and statutes that are federal in nature that transcends respective legislative jurisdictions. The statutory review will also look at the extent of ‘nature’s rights’ and means to capture the idea of ‘right to ecocentricism¹⁶’ as well as the need to shift from traditional perspectives of law on nature for man, towards law for nature, for ecological integrity and human well being.

¹³ Ibid fn 11 at pages 220-223, see Article 1.

¹⁴ Articles 73-79, Federal Constitution 1957; Malaysia Agreement 1963.

¹⁵ Article 92, Federal Constitution 1957.

¹⁶ Alder J, *Environmental Law and Ethics*, London Macmillan, 1999

The research will also explore the role and potential harmonisation or expansion of jurisdiction of various government stakeholders mandated directly with the conservation of biodiversity or carrying out mandates that impact on the conservation of biodiversity. A brief profiling of policies and its link to biodiversity conservation is also made to better facilitate the designing of an integrative framework with a clearer picture of the actors and aspects related to directions, responsibility and accountability.

Lessons learnt in the brief comparative study of the Australian EPBCA 1999, will contribute to detailing the structure of an integrative statute. Benefits of an integrative statutory framework and feasibility and proximity to a ‘federalism’ type structure or mixed decentralisation-federalism structure, and shifts towards cooperative federalism as opposed to traditional centralised and decentralised government are briefly discussed. Emphasis will be given to the Federal Constitution 1957, particularly provisions pertaining to the legislative and executive purview, and its links to the components of biodiversity¹⁷.

1.3 METHODOLOGY

Four steps have been taken, encompassing literature review; comparative study; analysis, profile and review; and stakeholder consultations. The theoretical aspects of the thesis particularly the method for profiling existing statutory regime, scenario generation (documented issues and options) and comparative study form the bulk of the literature review. Findings will include summaries in tabular and diagrammatic format. Key stakeholders were consulted throughout the whole period of the doctoral research, much of it were conducted by virtue of the candidates research engagement with the Ministry of Natural Resources and Environment (through research grants

¹⁷ Articles 73-79, Federal Constitution 1957; Malaysia Agreement 1963.

between the periods 2004 to 2006) and attachment at the Economic Planning Unit of the Prime Minister's Department, during the preparation of the Ninth Malaysia Plan (2006-2010) in 2004 to 2005 (the list of key stakeholders consulted are attached in the Appendix).

1.3.1. Literature Review

The literature reviewed is divided into two categories, i.e. specific cited references whereupon thoughts, ideas and commentaries are used to amplify, support or contribute to the formation of thought, analysis, idea and recommendation. Citation helped support the basis and execution of a particular analysis as well as state and supposition of a particular subject matter. The second category would be references that facilitated better understanding but not necessarily cited, which are also included in the attached bibliography. This section provides a glimpse of the literature reviewed in as much as, to how it has guided the work. The full review has been divided into separate Chapters.

The research takes off from the concerns expressed in relation to biodiversity, beginning with the policy statement, which came about as early as the mid 1970s and flagged in the Third Malaysia Plan (3MP)¹⁸. The term 'ecosystem' even makes its appearance in the 3MP, which given current trends for ecosystems that culminated with the publication of the 2005 Millennium Ecosystems Assessment¹⁹, would suggest that Malaysia's forefathers were ahead of their time in penning the nation's development plan. Concern stemmed from the exploitation of land and natural resources without due regard to ecosystems conservation. The 3MP states²⁰:

¹⁸ Third Malaysia Plan 1976-1980, Government of Malaysia 1976

¹⁹ *Supra fn 3*.

²⁰ *Supra fn 18*, at pg 219

“664. Malaysia’ overall environmental policy will take into account of the following factors:

- i. The impact that population growth and man’s activities in resources development, industrialisation and urbanisation have on the environment;
- ii. The critical importance of maintaining the quality of the environment relative to the needs of the population, particularly in regard to the productive capacity of the country’s land resources in agriculture, forestry, fisheries and water;
- iii. The need to maintain a healthy environment for human habitation;
- iv. The need to preserve the country’s unique and diverse natural heritage, all of which contribute to the quality of life; and
- v. The interdependence of social, cultural, economic, biological and physical factors in determining the ecology of man.”

The 3MP goes on to illustrate the consequences of development arising from disruption to forest cover, and the practice of activities that reduces the potential of productive forestry and wildlife, soil erosion, siltation of rivers and alteration of existing stable hydrological regimes, which in turn require measures for flood control, regulation of stream flows and purification of water supplies²¹. Subsequent Malaysia Plans have also made emphasis on the need to protect and conserve Malaysia’s natural biological resources, and commitments have been re-emphasised, particularly aspects

²¹ The annual flood incidences in Johor, Melaka and Pahang though brought about by heavy rainfall, are often further hampered the lack of natural and appropriate measures to channel flood waters and proximity of settlements to flood plains as noted in various newspaper reports, confirms the concerns raised in the 3MP.

related to legal issues in the recent Mid-Term review of the Ninth Malaysia Plan 2006-2010²².

The assumption that the research takes is that which is set out as a policy concern in the NBP²³, i.e.:

- Lack of a single comprehensive legislation in Malaysia which relates to biological diversity conservation and management as a whole;
- The need to address the sectoral nature of the existing legislative regime in addition to a need for a common objective; and
- The need to address the provisions of the Constitution of Malaysia 1957 that have unwittingly led to legislative non-uniformity.

Much of the discussion in this work lay hinged on determining the appropriate purpose and structure of a statute that will afford better conservation of biodiversity. It explores the possibility of shifting law towards non-anthropocentrism, where man becomes less of the centre of the purpose of the law, and nature or rather its state becomes the primary driver for the construction of a statute. This required a rethinking of what is the purpose of law.

Taking on from Hart's *The Concept of Law*²⁴, the fundamental question now arises, if we accept that statutes are a source of law, in the context of biodiversity conservation what would then be the purpose of this source of law and how do we categorise and interpret it? How do we shift the nexus from man to biodiversity, through the

²² Mid –Term review of the Ninth Malaysia Plan 2006-2010, as referenced at <http://www.epu.jpm.my/mtr-rm9/html/english.htm> (last accessed 30 June 2008). Pgs 84- 85.

²³ See *fn* 5.

²⁴ *Supra fn* 8.

regulation of human behaviour taking on a mechanistic approach²⁵, looking at the structure and coverage of the existing statutory regime, as well as constitutional position as opposed to the effectiveness?

Legal positivism helped structure the profiling of existing statutory regime as it stands, as this work does not intend to argue the merit and demerits²⁶ of the present regime, rather it is premised on a ‘truth’ set out in the National Biodiversity Policy. It takes on the moderate stance as echoed by Finis²⁷, focusing instead on the study of the law as it already exists²⁸, mindful of course of the numerous literature not favouring the adoption of the approach²⁹, but given that there is an ‘accepted truth’ couched within the NBP, the work was framed on the premise of legal positivism.

Accommodating the new direction required that the aspects that make up biodiversity and biodiversity conservation be understood, to help frame the provisions that will address the concerns, issues and factors that affect biodiversity. The host of literature that provides a portrait of what can be constituted as biodiversity and biodiversity conservation has been given much attention, particularly E.O Wilson’s³⁰ work on biodiversity, his outline of threats and needs to address threats to biodiversity, a context of what constitutes biodiversity and its conservation was developed.

²⁵ Despite ‘disapproval’ by Legrand, P., The Same and the Different, in Legrand, P. & Munday, R.(editors), *Comparative Legal Studies: Traditions and Transitions* (Cambridge University Press 2003), 240-313, at 292-294

²⁶ Supra fn 3, citing Austin at pg 5.

²⁷ Finnis, J. On the Incoherence of Legal Positivism, in Patterson, D.(ed.) *Philosophy of Law and Legal Theory: An anthology*, Blackwell Publishing 2002.

²⁸ See also arguments put forward on the validity of legal positivism in Coleman J L & Shapiro S (eds), *Jurisprudence and Philosophy of Law*, Oxford University Press 2002; Patterson D (ed.) *Philosophy of Law and Legal Theory: An anthology*, Blackwell Publishing 2002; Patterson D (ed.), *A Companion to Philosophy of Law and Legal Theory*, Blackwell 1996; Hart H L A, *The Concept of Law* (Second Edition), Oxford University Press, 1994; Coyle, S., *Positivism, Idealism and the Rule of Law*, OJLS 2006 26 (257); Greenberg, M., *How Facts Make Law*, Legal Theory 10 (2004) 157-198; and Patterson, D.M., Dworkin on the Semantics of Legal and Political Concepts, OJLS 2006 26 (545).

²⁹ See fn 21.

³⁰ Wilson, E.O., The current state of biological diversity. In *Biodiversity*, E.O Wilson and F.M. Peter (eds), 3-18. Washington, D.C.: National Academy Press, 1988.

The report prepared by the Millennium Ecosystems Assessment³¹ provided invaluable assistance in identifying the key threats to biodiversity and contextualising the need to help conserve the Earth's web of life. Various other literature sources were also referred to, some specifically, and the views, key ideas and facts are fleshed out in Chapter Three in more detail.

An outline of what is meant and what contextualises biodiversity and biodiversity conservation in Chapter Three drew from various literature resources (as detailed in Chapter Three and listed in the Bibliography) helped provide essential inputs in drawing a framework to cross check existing coverage in Malaysia with the ideal coverage from an international and scientific point of view. In addition, it provided a useful method to review and map albeit cursorily the match, mismatch, gaps and options.

Reasonable meaning which gives the most beneficial effect, taking into account its reason and logical consistency³² served as the basis for interpreting and profiling of the present statutory regime. Here the purposive approach was used to ground what is taken to be 'reasonable meaning', as advocated in the Interpretation Act 1948 and 1967³³, section 17A, which states that:

“...(i) in the interpretation of a provision of an Act, a construction that would promote the purpose or object underlying the Act (whether that purpose or object is expressly stated in the Act or not) shall be preferred to a construction that would not promote that purpose or object.”

³¹ Millennium Ecosystems Assessment, 2005. *Ecosystems and Human Well-Being: Biodiversity Synthesis*. World Resources Institute, Washington, D.C. This Report synthesizes and consolidates findings from a Millennium Ecosystem Assessment that was carried out between 2000 to 2005, and it was designed to meet the needs of the Convention on Biological Diversity 1992 (see Foreword of said document on page ii).

³² Kohler, J., Judicial Interpretation of enacted Law, in Bruncken E and Register, L. B. (Trans.) *Science of Legal Method: Select Essays by Various Authors* (New York: Augustus M Kelly Publishers 1969) at pages 187-195.

³³ Interpretation Act No. 23 of 1967

Literature review of methods to aid the comparative study of the Australian EPBCA 1999 drew heavily on the works of Zweigert and Kotz (1998)³⁴ particularly the functionalist approach to comparative study. In profiling the existing statutory regime, Stravropoulos' interpretivism³⁵ was adopted, in that where practice of interpretation is concerned, it is a twofold task, i.e. formulate alternative hypotheses that are consistent with the facts being practised and indicate which among them provides better justification of facts in practice.

1.3.2. Comparative study

In order to determine a comparable statutory framework model from which lessons would be drawn from, there was a need to focus on countries that are part of the 17 mega diverse group, which also shared a similar federated system of government. Australia provided a good point of reference, as it is one of the 17 mega diverse countries, and it has a federated system of government, a legacy which was left by the British similar to that in Malaysia. Its Constitution too bears much similarity having come from the same drawing board that served the promulgation of Malaysia's own Constitution.

In addition, it had in 1999 passed a law that focused on biodiversity conservation, i.e. the Australian Environment Protection and Biodiversity Conservation Act 1999 ("EPBCA 1999"). Drawing on the profile and lessons learnt from the EPBCA 1999 related to the structuring and formation of an integrative statute, a checklist was drawn up. A preliminary integrative statutory structure was then developed, taking on an

³⁴ Zweigert, K. & Kotz, H, Introduction to Comparative Law (Tony Weir trans., 3d ed. Oxford University Press, 1998)

³⁵ Stravropoulos, N., Interpretivist Theories of Law, in Zalta, E. N. (ed.), The Stanford Encyclopedia of Philosophy (Winter edition 2003) as can be accessed at <http://plato.stanford.edu/archives/win2003/entries/law-interpretation>, last accessed 2 April 2008. See also http://Isolum.typepad.com/legal_theory_lexicon/2004/04/legal_theory_le_3.html last accessed 2 April 2008.

umbrella statute approach that houses different statute ‘sectors’, to an extent bridging existing statutes, taking into account different implementation scales and category. Key to this would be the application of the concept of cooperative federalism.

1.3.3. Analysis, profile and review

As the hypothesis is hinged on statements contained in the NBP³⁶, i.e.:

- Lack of single comprehensive legislation;
- Sectoral nature of existing statutory regime; and
- Legislative non-uniformity;

two main assumptions are drawn from this. Firstly, there exists a major constitutional issue since the Federal Constitution does not have clear provisions for biodiversity conservation, whereby the role of Federal and State governments have not been clearly defined. Secondly, current statutory provisions are inadequate, and that roles of current stakeholders require redefining.

Strategy IX of the NBP³⁷ calls for four major actions. Firstly, the review of legislation to reflect biological diversity needs, and ensuing policy action plans therein provides for the identification and review of existing legislations. Secondly, the identification of new or major enhancements required based on existing international and national commitments and existing rights in addition to emerging threats and issues; review of existing assessment requirements. Thirdly, the improvement of existing legal mechanisms to raise awareness. Fourthly, the review of existing State and Federal legislation to promote uniform implementation between States in Malaysia.

³⁶ National Biodiversity Policy 1998, pgs 19-20

³⁷ National Biodiversity Policy 1998, pgs 25, 33-34

This based on literature review, sets the scene for the interpretation of statutes, grounded on legal positivism. Based on the purposive approach³⁸ a matrix is drawn up to map and contextualise the existing coverage of the present statutory regime with findings related to Chapters Three, Four and Five.

1.3.4. Stakeholder consultations

Select stakeholders, primarily from government agencies, were consulted, and ideas and feedbacks were sourced to help determine and frame options. These key persons were consulted throughout the course of the research.

1.4 **CHAPTER PREVIEW**

Eight chapters frame the thesis. Chapter Two provides the basis for which much of the method, approach, review and analysis for Chapters Six and Seven, and the structuring of the framework in Chapter Eight. It details out the approaches to be taken in the review of statutes, interpretation of the same as well as fundamentals required to structure an integrative statutory framework. The arguments for legal positivism as spelt out briefly here are illustrated therein.

Chapter Three puts biodiversity, conservation and biodiversity conservation into context, framing the scope of the thesis. Issues, status, trends and threats to biodiversity are noted and what constitutes biodiversity and ecosystem categories, resources, functions and services and key priority areas are briefly detailed, with emphasis on matters that require immediate attention. This Chapter also flags related

³⁸ See detailed discussions on the choice of approach in Chapter 3.

activities that impact positively and negatively on biodiversity, briefly taking into account future directions in biodiversity conservation.

Chapter Four looks at the biodiversity conservation from a global context. Selected multilateral environmental agreements (MEAs) are briefly discussed, and key aspects that can be used to help frame an integrative statutory framework are highlighted.

Chapter Five sets the scene as to where biodiversity 'is' in Malaysia. It provides a brief outline of what the policy emphasis is and how it evolved from the early 1970's to date. It also highlights the directions, which Malaysia hopes to gear itself towards in as far as biodiversity conservation is concerned.

Chapter Six focuses on the profiling of existing statutory regime. Discussions include statutory provisions particularly within the Federal Constitution to ground arguments for integration and basis for biodiversity conservation. Emphasis is on the approach taken on the review and method used to interpret statutes and the matrix development in mapping the statutory landscape, profiling the laws related to biological resources, biodiversity (functions and services included) and conservation form the basis to feed to the preliminary integrative statutory framework. It also, through the listing of options for statutory integration links the finding of Chapters Two to Five.

Chapter Seven looks at Australia and the measures put into place to integrate related laws under the Australian EPBCA 1999. It provides a short historical evolution of the EPBCA 1999 and the rationale for its promulgation. The strengths and weaknesses are used to ground the options for consideration in Chapter Eight.

Chapter Eight sets out the premise for integration and preliminary integrative statutory biodiversity conservation framework. It consolidates findings from Chapters Two to Seven, and considers the drafting needs to suit the framing of an integrative statutory framework akin to that adopted in Australia.

Chapter Nine summarises the findings, including recommendations therein as to the benefits of such integration and the possible challenges. It also briefly states the trade offs in having an integrative statutory framework. The structure, processes and overall concept of the work undertaken and key results can be seen in Diagram 1.1. which serves as the conceptual framework of the thesis.