

## **Policy Convergence in International Biodiversity Regimes: A Perspective from Malaysia**

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### **Abstract**

*Malaysia has become a signatory party to international biodiversity regimes since 1992. However, no study to date has comprehensively assessed to what extent Malaysia has implemented its commitment to the regimes. This paper assesses Malaysia's implementation of the biodiversity regimes at the governmental levels. By focusing on Malaysia's policy convergence in the regimes, it examines the implementation within the land biodiversity policies. This paper finds that the federal agencies and some of the state governments are progressively implementing the biodiversity regimes at the level of the land biodiversity policies. However, there are loopholes in the implementation that need to overcome in order to put the country on the appropriate implementation track. This finding is useful, as it provides a basic understanding of Malaysia's implementation of international biodiversity regimes.*

**Keywords:** Malaysia; International Biodiversity Regime, Convention on Biological Diversity, Cartagena Protocol on Biosafety, Convergence Behaviour

### **1. Introduction**

The United Nations's instruments for global environmental protection, for instance, international environmental regimes are indispensable for making the UN agenda of sustainability achievable in all countries. Malaysia has been one of the signatories and the rectifiers of the regimes, including that of its biodiversity regimes. Malaysia started becoming a party to the biodiversity regimes since the 1990s when it signed and ratified the Convention on Biological Diversity (CBD) respectively in 1992 and 1994. After that Malaysia signed and ratified the Cartagena Protocol on Biosafety (CPB) respectively in 2000 and 2003. This development, however, is taken for granted. Until now no comprehensive assessment has been done by any writers to evaluate how far Malaysia has implemented its commitment to the regimes. This paper argues that assessing whether countries have implemented the biodiversity regimes is of importance not only to the United Nations but also to the country. For the UN, it would show how countries have responded to the UN agenda on sustainability.

For Malaysia as a developing country, it would show its commitment to sustainability and to the idea of global environmental protection. For that reasons, this paper assesses Malaysia's implementation of the biodiversity regimes at its governmental policy levels. It focuses on the land biodiversity policies or the non-marine biodiversity policies. It aims to assess whether or not Malaysia has shown its convergence behavior in the regimes. This paper finds that the federal agencies are progressively implementing the non-marine biodiversity policies at domestic and international levels. It suggests that the federal government has been implementing convergence behavior in the biodiversity regimes. It also finds that the state governments of Sabah and Sarawak have moved into the same convergence manner as they have assured that the biodiversity issues to take place in their policies and actions. This finding is therefore reflects a translation of the United Nations aspirations for its sustainability agenda into actions at Malaysia's level. It is useful, as it provides a basic understanding of Malaysia's implementation of international biodiversity regimes.

## 2. Biodiversity Issues: From Natural Science to International Politics

Biodiversity issues have long been of a great concern to natural scientists, particularly among biologists. Biological diversity or biodiversity here means “the variability among living organisms from all sources, including, *inter alia*, terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems” (FAO Corporate Document Repository). The biodiversity issues have entered the field of International Politics since the Second World War. For instance, Schmidt (1946: 230–232) wrote on the role of ‘naturalists’ in the US foreign policy. The US government sent them to the US colonies in the developing world to take advantage of the richness of the natural resources and to fulfill the ‘scientific ambition’ of the US government (*ibid.*). The next publication appeared in the 1960s. It was when Harold and Margaret Sprout (1965) provided an ecological viewpoint, which they stressed as important aspect in evaluating foreign policy. They introduced ‘man-milieu relationships’, which means the ‘whole spectrum of enviroing factors, human as well as non-human, intangible as well as tangible’ (Harold and Margaret Sprout 1965: 41). It was only since the 1990s that biodiversity issues - as part of environmental issues - had been high on the international agenda for various political actors. During the decade, most governments also started to regard environmental issues as a major issue; central to their core national interests and to their international politics (Chasek, Downie & Brown 2006). Malaysia has started to give serious attention the issues in its international politics since the decade.

## 3. Regime for Biodiversity Conservation

Much has been said about the implementation of international environmental regimes. Among the prominent writers are Chayes and Chayes (1993; 1995); Haas et al. (1993); Mitchell (1994); Downs et al. (1996); Meyer et al. (1997); Simmons (1998); Vogler and McGraw (2000: 123–141); Hildebrand (2000); Miles (2000); and Checkel (2001) and Chasek, Downie and Brown (2006). Among them, Chasek, Downie and Brown (2006) said that there are many types of international environmental regimes, for instance whaling, climate change, and protection of endangered species and biodiversity regimes. The biodiversity regime was officially formed in 1992 as a result of the Convention on Biological Diversity (CBD) (Chasek, Downie and Brown 2006).

Regimes for biodiversity conservation or biodiversity regimes exist as part of international environmental regimes of the UN. Its existence helps provide states and the United Nations with the better management of global biodiversity protection. The term environmental regime used in this paper is derived from Krasner (1983). According to him, regimes mean

“sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors’ expectations converge in a given area of international relations”... principles are represented by coherent bodies of theoretical statements about how the world works; norms specify general standards of behavior, and identify the rights and obligations of states; rules operate at a lower level of generality the principles and norms, and they are often designed to reconcile conflicts which may exist between the principles and norms; and decision-making procedures identify specific prescriptions for behavior” (Krasner 1983: 2–5; see also Little 2008).

The example of regimes may be seen in a form of binding agreements, or legal instruments and non-binding regimes. The non-binding regimes mean non-binding codes of conduct and guidelines for international environmental problems (Chasek, Downie and Brown 2006: 20). The binding regimes may be categorized into two types: framework conventions and protocols. The former persists if a convention is negotiated in anticipation that parties (states) will negotiate one or more subsequent elaborating texts. The latter happens when negotiations spell out specific obligations of the parties (states) on the overall issue in question or on a narrower sub-issue (Chasek, Downie and Brown 2006: 19–20).

## 4. Material and Methods

This paper is based on a study that applied qualitative methods. The methods were in-depth interviews with selected key informants and documentary analysis. The methods were chosen so that a wide range of biodiversity regime implementation in Malaysia would be covered. The documents have been obtained from the authoritative CBD websites and three federal agencies in charge of land biodiversity matters: 1) Terengganu PERHILITAN; 2) Kuala Lumpur PERHILITAN; and 3) the Institute of Biodiversity in Lanchang, Pahang.

The job scopes of the Institute of Biodiversity are threefold: to train the staffs of the Department of Wildlife and National Parks, to develop research on the nation's biodiversity resources, and to conduct public education through programs and activities. PERHILITAN is a short name for the Department of Wildlife and National Parks. It is a federal agency that operates in the Peninsular Malaysia. Executed under Malaysia's Ministry of Natural Resources and Environment, its objectives include 1) protection, management and preservation of biodiversity for the production of optimum benefits; 2) protection and development of protected areas for the purpose of research, education, economic, aesthetic, recreation and ecological purposes; and 3) enhancement of knowledge, awareness and public support on the importance of biodiversity conservation" (Department of Wildlife and National Parks). Terengganu PERHILITAN is a branch agency of Kuala Lumpur PERHILITAN. This agency focuses its work on the area of National Park Tanjung Mentong, Terengganu. At the analytical level, the author analysed the documents obtained from the authoritative CBD websites and three federal agencies by using a content analysis method.

The data of the in-depth interviews are a supplementary source to the documentary data. The interviews were conducted with selected key informants from the three agencies (Terengganu PERHILITAN, Kuala Lumpur PERHILITAN, and the Institute of Biodiversity in Lanchang, Pahang). It was conducted in the form of focus groups using informal conversational interview. In Social Science, the method refers to as "a small group of individuals, who meet together to express their views about a topic defined by the researcher... a facilitator, or moderator, leads the group and guides the discussion between the participants" (Gilbert 2008: 228). This method "enables the researcher to explore participants' views and experiences on a specific subject in depth" (Gilbert 2008: 228). This study follows "step-by-step guide to running the focus group" suggested by Gilbert (2008), that is based on a five-stage model: 1) introduction; 2) opening cycle; 3) introductory questions; 4) key questions; and 5) ending questions. The interview data was analysed using variable-oriented analysis to look for patterns. In addition to the interviews above, this paper is also based on information obtained from the Division of Biodiversity, Ministry of Natural Resources and Environment, Malaysia.

## **5. Results and Discussions**

The issues of policy convergence may be traced in the debates on compliance. These debates have established in the literature of international environmental politics as a cornerstone of international policy implementation (Haggard 1987; Simmons 1998; and Knill 2005). In the debates, Bull (1977) argues that states apply policy convergence when they there is a sign that they have followed and have made use of the agreements they signed. Moreover, Bennet (1991) argues that policy convergence is a source of compliance because states move from different positions toward some common points. In the context of Malaysia, not much has been revealed about details of policy convergence in international biodiversity regimes. In the literature, writers like Nijar (1994 and 1996) and Raustiala and Victor (1996) touched it as an indirect aspect of their study. In this paper, the elements of policy convergence in international biodiversity regimes are discussed according to the data in Table 1 and 2. The distinction between the tables is justifiably based on different stages of Malaysia's convergence in the international norms of the biodiversity regime.

### **5.1 The 1992-1999 Period**

The CBD may be referred to as a framework convention because it has a regular conference for example the Conference of Parties (COP) that establishes a set of general principles, norms and goals for cooperation. The main objective of the CBD is threefold: 1) 'to ensure conservation of biological diversity; 2) 'sustainable use of its components'; and 3) 'to promote a fair and equitable sharing of the benefits arising out of utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, and by appropriate funding' (Text of the CBD, Article 1). The period 1992-1999 saw Malaysia started to apply the framework convention of the CBD at the federal and state government levels. At the federal level, Malaysia passed the Malaysian Guideline on the Release of Genetically Modified Organisms to the Environment of 1997 and the National Biodiversity Strategy and Action Plan of 1998. At the state government level, the Sarawak state government of Sarawak had been at the forefront in responding to the CBD. The state government passed the Sarawak Biodiversity Centre Ordinance of 1997 that brought about the establishment of the Sarawak Biodiversity Centre that its mission is to "discover and harness Sarawak's biodiversity resources through research and development for the benefit of Sarawak" (The Official Website of Sarawak Biodiversity Centre).

Malaysia's application of the framework convention of the CBD during the 1992-1999 period also exhibited through its involvement in the Conference of Parties (COP). Throughout the period, Malaysia had been an active participant. For instance, Malaysia joined all the COPs between 1992 and 1999 namely the Second COP (COP2), the Third COP (COP3), and the Fourth COP (COP4). The COPs had been held respectively in Jakarta (Indonesia) in 1995, Buenos Aires (Argentina) in 1996, and Bratislava (Slovakia) in 1998. Malaysia also has been reported to submit in 1998 its implementation progress to the CBD through the First National report to the COP of CBD.

**Table 1: Malaysia's Policy Implementation of the International Norm of Convention on Biological Diversity , 1992-1999**

<i>Malaysia's policy implementation</i>		
<i>Decision-making procedure</i>	<i>Referral institution</i>	<i>Local policy/rule adopted</i>
First national report to the Conference of Parties (COP) of the Convention on Biological Diversity, 1998	Key referral institution: 1. Ministry of Science, Technology and Environment 2. PERHILITAN	1. National Biodiversity Strategy and Action Plan, 1998 2. Malaysian Guideline on the Release of Genetically Modified Organisms to the Environment, 1997 3. Sarawak Biodiversity Centre Ordinance 1997 4. Chapter 19, 7 <sup>th</sup> Malaysia Plan (1996-2000)
	Other referral institutions: 1. Sarawak Biodiversity Centre 2. National Biodiversity Committee, 1994	

Source: Kamaruddin, Research Officer, Institute of Biodiversity, Lanchang, Pahang, 27 February 2012; Mustapha, Senior Deputy Director, Kuala Lumpur PERHILITAN, interview at the PERHILITAN Headquarters, 28 February 2012; and Convention on Biological Diversity. (Online] Available: <http://www.cbd.int/> (July 4, 2012).

## 5.2 The 1999-2009 Period

The 1999-2009 period is referred in this paper to as the second phase of Malaysia's biodiversity policy implementation because it was the time when the policies had been burgeoning at both domestic and international levels. This period saw Malaysia widened its commitment to perform international protocols at the levels and according to the norms or principles of the Cartagena Protocol on Biosafety. The Protocol has the elements of what Chasek, Downie and Brown (2006) call as "protocols of regimes" that means "specific obligations of the parties on the overall issue in question or on a narrower sub-issue". The Cartagena Protocol on Biosafety aims "to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements" (Text of the Cartagena Protocol on Biosafety, Article 1).

Malaysia's commitment to perform the Cartagena Protocol on Biosafety at domestic level may be derived from two sources: the state and federal government actions. It was at the state government level that Sabah state government had initiated the Sabah Biodiversity Enactment (2000). This initiative brought about the setting up of Sabah Biodiversity Centre. This centre has served as an institutional framework for coordination of biodiversity actions in the state. The initiative also led to the establishment of Sabah Biodiversity Council that has functioned as a decision-making body for matters relating to the state's biodiversity (The Official Website of Sabah Biodiversity Centre). In the Peninsular Malaysia, the National Council for Biodiversity and Biotechnology was established by the Malaysian Cabinet Ministers in May 2001 to coordinate development of biodiversity and biotechnology planning in the country. Members of this council including all the Chief Ministers, ten (10) ministers of the federal government, Chief Secretary to the Government and the Attorney General of Malaysia.

Under the National Council for Biodiversity and Biotechnology, six meetings involving the chief ministers had been conducted between 2000 and 2009. Of all the meetings, the 2009 meeting decided for all ministries, state governments and government agencies to include biodiversity conservation in planning and implementing their development programs (Press Statement of the Deputy Prime Minister at the 2009 Meeting on National Biodiversity and Biotechnology Council).

The period 1999-2009 saw Malaysian government took three major proactive actions with regards to its biodiversity policy implementation as follows:

- a) First, the government established a few biodiversity institutions at the federal government level. Under the execution of the Ministry of Natural Resources and Environment, the National Council for Biodiversity and Biotechnology was set up in 2001. After that the Institute of Biodiversity was set up in 2004 and the Genetic Modification Advisory Committee and the National Biosafety Board both were set up in conjunction with the passing of the Biosafety Act of 2007. The passing of the Biosafety Act also led to the establishment of the Department of Biosafety in 2007.
- b) Second, the government passed more biodiversity policies than that of the earlier period. It covers both specific biodiversity regulations and biodiversity-related regulations. The former includes for instance the Biosafety Act of 2007 (Act 678), the Guidelines of Institutional Biosafety Committee (IBC): Use of Living Modified Organism and Related Material of 2007, the National Biotechnology Policy of 2005, the Protection of New Plant Variety Act of 2004 and the National Wetlands Policy of 2004. The latter consists of for instance the National Urbanisation Plan of 2006, the National Physical Plan of 2005, and the National Policy on the Environment of 2002. The National Policy on the Environment of 2002 aims at “continuous economic, social and cultural progress and enhancement of the quality of life of Malaysians, through environmentally sound and sustainable development” (Document of National Policy on the Environment 2002: 1). One of its principles, that relates to the biodiversity matters is “conservation of nature’s vitality and diversity” (Document of National Policy on the Environment 2002: 4).
- c) Third, the government made extensive efforts to implement the norms of the Cartagena Protocol on Biosafety. For instance, Malaysia submitted to the Convention on Biological Diversity the Fourth National Report (2009), the First Regular National Report on the Implementation of the Cartagena Protocol on Biosafety (2007), the Interim National Report on Implementation of the Cartagena Protocol on Biosafety (2005), the Third National Report to the Convention on Biological Diversity (2005), the Second National Report to the Convention on Biological Diversity (2005), and the Report on Implementation of Global Taxonomy Initiatives (GTI) Work Programme (2004).

**Table 2: Malaysia’s Policy Implementation the International Norm of Cartagena Protocol on Biosafety, 2000-2009**

<i>Malaysia’s policy implementation</i>		
<i>Decision-making procedure</i>	<i>Referral institution</i>	<i>Local policy/rule adopted</i>
1. Fourth National Report to the Convention on Biological Diversity, 2009 2. First Regular National Report on the Implementation of the Cartagena Protocol on Biosafety, 2007 3. Interim National Report on Implementation of the Cartagena Protocol on Biosafety, 2005 4. Third National Report to the Convention on Biological Diversity, 2005 5. Second National Report to the Convention on Biological Diversity, 2005 6. Report on Implementation of Global Taxonomy Initiatives (GTI) Work Programme, 2004	<p>Key referral institution:</p> <ol style="list-style-type: none"> <li>1. Ministry of Science, Technology and Environment (until 2004)</li> <li>2. Ministry of Natural Resources and Environment (NRE)</li> <li>3. Department of Biosafety, NRE</li> </ol> <p>Other referral institutions:</p> <ol style="list-style-type: none"> <li>1. Institute of Biodiversity under the Department of Wildlife and National Parks, 2004</li> <li>2. National Council for Biodiversity and Biotechnology, 2001 (since 2009 this council has been modernized into the National Council for Biodiversity)</li> <li>3. Genetic Modification Advisory Committee</li> <li>4. Sabah Biodiversity Centre</li> <li>5. Sabah Biodiversity Council</li> <li>6. National Biosafety Board</li> </ol>	<ol style="list-style-type: none"> <li>1. The Biosafety Act 2007 (Act 678)</li> <li>2. Guidelines of Institutional Biosafety Committee (IBC): Use of Living Modified Organism and Related Material, 2007</li> <li>3. National Urbanisation Plan, 2006</li> <li>4. National Biotechnology Policy, 2005</li> <li>5. National Physical Plan, 2005</li> <li>6. National Wetlands Policy, 2004</li> <li>7. Protection of New Plant Variety Act, 2004</li> <li>8. National Policy on the Environment, 2002</li> <li>9. Sabah Biodiversity Enactment, 2000</li> <li>10. Chapter 22, 9<sup>th</sup> Malaysia Plan, (2006-2010)</li> <li>11. Chapter 19, 8<sup>th</sup> Malaysia Plan, (2001-2005)</li> </ol>

Source: Kamaruddin, Research Officer, Institute of Biodiversity, Lanchang, Pahang, 27 February 2012; Mustapha, Senior Deputy Director, Kuala Lumpur PERHILITAN, interview at the PERHILITAN Headquarters, 28 February 2012; and Convention on Biological Diversity. (Online] Available: <http://www.cbd.int/> (July 4, 2012).

Overall, the data in both Table 1 and 2 above have shown Malaysia's active response to the international biodiversity regimes both at national and international levels. The data also imply that Malaysia has adopted policy convergence in the biodiversity regimes. Although Malaysia is now regarded as an active state in dealing with international biodiversity regimes, a poor link and inconsistency in the implementation of the norms of the biodiversity regimes between the federal and the state government agencies still existed. At this point, the federal agencies played more active roles in internalizing and integrating the norms of biodiversity regimes in national sphere than that of the state governments. This particularly those of the Malay Peninsular. Moreover, the complex nature of the development policy planning and agenda on biodiversity of each state government of the Malay Peninsular may also contribute to the poor link and inconsistency of actions (Kamaruddin, Research Officer, Institute of Biodiversity, Lanchang, Pahang, 27 February 2012; Mustapha, Senior Deputy Director, Kuala Lumpur PERHILITAN, interview at the PERHILITAN Headquarters, 28 February 2012).

Speaking of the policy challenges above, an information from the key informant of the Division of Biodiversity (Ministry of Natural Resources and Environment) supports that the multifaceted nature of the development planning and agenda on biodiversity of each state government may be an important reason for Malaysia to opt the reverse-step approach in fulfilling its commitment to the Nagoya Protocol on Access and Benefit-sharing, which was endorsed its opening by the United Nations in 2010. This approach is different from the forward-step approach which Malaysia adopted when it dealt with the CBD and the Cartagena Protocol on the Biosafety. The reverse-step approach means a country signs the regimes before it adopts its norms at national level. Whereas, the forward-step approach means a country signs the regimes after it passes its national policies associated with the regimes.

Despite the challenges above, it is still no doubt that Malaysia's implementation of biodiversity regime is progressing well. After the announcement of the Nagoya Protocol on Access and Benefit-sharing in 2010, Malaysia took four important actions as follows:

- a) First, Malaysia set up the National Biological Diversity Clearing House Mechanism (CHM) Portal. Introduced in 2012, this mechanism recognizes disseminations of policy information of international environmental norms through the new media.
- b) Second, it committed to the formulation of The Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety;
- c) Third, it passed the local policy of Biosafety (Approval and Notification) Regulations of 2010;
- d) Fourth, it considered local actions to support the Convention on Biological Diversity and the Cartagena Protocol on Biosafety through Chapter 6, 10<sup>th</sup> Malaysia Plan (2011-2015) (Kamaruddin, Research Officer, Institute of Biodiversity, Lanchang, Pahang, 27 February 2012; Mustapha, Senior Deputy Director, Kuala Lumpur PERHILITAN, interview at the PERHILITAN Headquarters, 28 February 2012).

## **6. Conclusions and Policy Considerations**

This paper has discussed a background of Malaysia's implementation of international biodiversity regimes. By focusing on the policy convergence in the regimes and in the context of the land biodiversity policies, this paper has made use of the qualitative material and methods. It has found that there were positive moves in federal government agencies to fulfill international biodiversity regime outlined in CBD objectives. This paper has also found that Malaysia has shown its commitments not only towards the achievement of the framework convention of the CBD, but also the Cartagena Protocol on Biosafety. Data in Table 1 and 2 presented above reveal that Malaysia has taken some step further in supporting the implementation of the biodiversity regimes. All these imply that Malaysia has convergent policy response to biodiversity regimes. However, this study also found that there were still loopholes in the convergent response. First, implementation of the regimes at national and local levels in countries practicing federalism would be smoother and more effective if cooperation between state government agencies and the federal agencies in internalizing the international environmental norms of the biodiversity regimes into the state government policies and agenda are improved. However, the ambition is still desirable, especially when it comes to the state governments in the Peninsular Malaysia. It is recommended that the state governments in the Malayh Peninsular have to be more proactive in internalizing the international environmental norms into its development plans and agenda. Development is important but spreading awareness of the norms at national and local levels is also essential.

Thus, sustaining both the aspects in a balanced way in development projects and programmes would help quicken the achievement of Malaysia compliance with the international biodiversity regimes.

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