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REVIEW ARTICLE
REVISITING THE STATUS OF THE MALAYSIAN LAWS AND POLICIES ON BIODIVERSITY

WAN IZATUL ASMA WAN TALAAT

Institute of Oceanography & Environment, Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia.

**Corresponding author: wia@umt.edu.my*
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Abstract: Since the Convention of Biological (CBD) was first opened for signature more than 28 years ago on 5 June 1992, there have been tremendous development in biodiversity conservation at the international level. Almost two decades later, five Strategic Goals and twenty targets were set under the Aichi Biodiversity Targets 2011-2020 (Aichi Targets) in order to achieve sustainable use and conservation of biodiversity. This paper revisits the current biodiversity policies and laws in Malaysia, and examines how much development has taken place at the national level since the CBD was first signed and subsequently ratified by Malaysia in 1994. While the First NPBD was "overhauled" and given a new facelift through the Second National Policy on Biodiversity 2016-2025 (Second NPBD) to meet the Aichi Targets, there have also been progressive development on the corresponding laws. Several laws were passed to fulfil the national obligations under CBD and the earliest specific legislation is the Biosafety Act 2007, which was enacted among others to implement the CBD and Cartagena Protocol on Biosafety. Another specific legislation passed is the Access to Biological Resources and Benefit Sharing Act 2017, which is to give effect to the cornerstone principle of access and benefit sharing of the CBD and its Nagoya Protocol. Alas, there are still gaps hindering effective biodiversity conservation in Malaysia requiring urgent revision of the existing laws to correspond with the development at the international. In addition, the complicated biodiversity governance in Malaysia may also contribute in terms of ineffective implementation and enforcement of biodiversity conservation efforts. These may collectively hamper Malaysia in fulfilling her international obligations under the CBD and meet the Aichi Targets, as well as the 2030 Agenda for Sustainable Development.

Keywords: CBD, Aichi Targets, Sustainable Development Malaysia, Biodiversity Laws and Policies.

Introduction

The year 2020 has been marked as the Biodiversity Super Year. Much have in fact taken place since the Convention of Biological (CBD) was first opened for signature more than 28 years ago on 5 June 1992, during the Earth Summit in Rio de Janeiro, and was subsequently entered into force on 29 December 1993. Malaysia first signed and ratified the CBD on 12 June 1992 and 24 June 1994 respectively, and officially became a State Party to the Convention on 22 September 1994. By signing and ratifying an international convention or treaty like CBD, Malaysia has indeed a "contractual" duty, under the international law principle of *pacta sunct servanda*, which literally translates as "treaties shall be complied with", to fulfil her obligations under CBD. This legal maxim denotes an underlying principle of international law describing a system of treaty-based relations between sovereign states, who opt to become parties to a treaty.

The obligations of State Parties of CBD revolves around the three main goals of the CBD as follows; firstly, for the conservation of biodiversity; secondly, for the sustainable use of its components; and thirdly, for the fair and equitable sharing of benefits arising from biological or genetic resources. In other words, the prime objective of the CBD is to

encourage State Parties to develop national strategies for the conservation and sustainable use of biodiversity. Thus, the CBD is oftentimes considered as a key document in promoting sustainable development particularly regarding the third goal on fair and equitable sharing of benefits arising from biological or genetic resources.

In Talaat *et al.* (2013), it has earlier been suggested that despite launching the National Policy on Biological Diversity in 1998 (NPBD), the ensuing efforts to legislate relevant laws to meet her obligations under the CBD, and its two supplementary agreements, the Cartagena Protocol on Biosafety 2000 and Nagoya Protocol on Access and Benefit Sharing 2010, was rather slow. It must however be noted that the development at the national level is dependent on, and should correspond with, the development at the international level.

The Strategic Plan for Biodiversity 2011-2020 sets the Aichi Biodiversity Targets (Aichi Targets) through five Strategic Goals in order to achieve sustainable use and conservation of biodiversity, which are *inter alia* to address the underlying causes of biodiversity loss, and to enhance implementation through participatory planning, knowledge management and capacity building. Twenty Aichi Targets were specifically set to meet the five Strategic Goals by 2020 by the State Parties to the CBD, including Malaysia.

The Current Status

Much development has taken place since the CBD was first signed and ratified by Malaysia. While the First NPBD was overhauled and given a new facelift almost two decades after its launch due to the development at the global arena, there have also been progressive development on the corresponding laws under the scope of biological resources.

Biodiversity Policies

Attempting to meet Aichi Target 17, which states that a policy instrument shall have been developed and adopted by each State Party by 2015, the Government has stepped up the efforts to protect and conserve our biodiversity through the launching of the Second National Policy on Biodiversity 2016-2025 (Second NPBD) through numerous stakeholders' consultations and inputs.

Reiterating Malaysia's commitment to continuously conserve her biodiversity, promote its sustainable use and ensure fair and equitable sharing of the benefits arising out of the utilisation of biological resources in its Policy Statement, the Second NPBD emphasises on five salient Principles as follows: -

1. Heritage: Recognition that biodiversity is a national heritage that must be sustainably managed, wisely utilised and conserved for future generations.
2. Precautionary: Based on the recognised environmental law Precautionary Principle, lack of full scientific certainty should not be hindering measures to minimise biodiversity loss.
3. Shared Responsibility: Acknowledging the roles of society in conservation and sustainable utilisation of biodiversity, thus all sectors of society must share the responsibility to ensure the commitments are met.
4. Participatory: Planning and management of biodiversity must be carried out in a participatory manner through consultative process and local community engagement.
5. Good Governance: To guarantee effective biodiversity conservation, good governance must be practised including accountability and transparency.

These five Principles are to guide the goals, targets and actions set under the Second NPBD support the national vision for sustainable development. The seventeen targets set under the Policy corresponds with all the Aichi Targets. Principle 4 strategically puts a stress on participation from local actors as emphasised by the Aichi Targets. Correspondingly, to achieve

sustainable use and conservation of biodiversity, this strategic plan of the CBD requires States to do as follows: -

1. Aichi Target 1 – To raise awareness for biodiversity.
2. Aichi target 2 – To integrate biodiversity values into national and local development strategies.
3. Aichi Target 3 - Involve different stakeholder groups in developing approaches to sustainable production.

As noted by Zinngrebe (2016), reaching these Aichi targets will require understanding local actor groups and their value systems, as well as allowing for local approaches to sustainable development (for instance, traditional ecological knowledge) to be incorporated into biodiversity governance. Lying in the same vein, recognition of community-based management approach in biodiversity conservation, such as the Tagal practice in Sabah cited under Target 2 of Goal 1, is a notable move because biodiversity conservation requires cooperation from all sectors, most particularly the direct beneficiaries of the resources.

Guided by the five salient principles, the Second NPBD set five national goals to achieve, which can be basically narrated as follows: -

1. Increased commitment of all stakeholders in biodiversity conservation ;
2. Reduced direct or indirect pressures on biodiversity;
3. Protected key ecosystems, species and genetic diversity;
4. Accrued equitable benefits from utilisation of biodiversity to all; and
5. Improved knowledge, skill, and capacity to conserve biodiversity.

Another remarkable milestone in biodiversity conservation is when the Policy dedicates a specific section on implementation by stressing on shared responsibility to conserve biodiversity. Section 3 on Implementation Framework spells out the roles and responsibilities of all the seven segments of society; federal government, state governments, civil society, indigenous and local communities (ILCs), private sectors, research and education communities, and last but not the very least, the general public. Realising the importance of community participation and local actors, the Malaysians are urged to play their parts in biodiversity conservation.

With five national goals, seventeen targets and fifty-seven actions to achieve by 2025, it is quite a daunting task for Malaysia. Alas, this Second NPBD is indeed a welcome move due to significant population increase and socio-economic changes faced by Malaysia during the eighteen years gap since the First NPBD was launched in 1998. The time-bound and quantifiable targets, which correspond to the Aichi Targets, may assist the Second NPBD to fare better than its predecessor. With clearer targets, actions and timelines for implementation, as well as calls for active participation by all stakeholders through its five salient Principles, this Policy may be able to help Malaysia fulfil her obligations under the CBD and meet the Aichi Targets, as well as the Sustainable Development Goals set under the 2030 Agenda for Sustainable Development.

Biosafety Laws

As noted earlier, in line with the development at the international level, biosafety laws in Malaysia experienced a considerably speedier development. As one of the several principal issues addressed by the CBD, biosafety refers to the need to protect human health and the environment from any adverse effect of biotechnology and its products. The Convention provides explicitly on the measures the State Parties are obliged to take in respect of biosafety where they are obliged to regulate, manage or control at the national level the risk associated with the use and release (including safe transfer and handling) of living modified organisms (LMOs) resulting from modern biotechnology. After numerous and lengthy negotiations, the

Cartagena Protocol on Biosafety was opened for signing in 2000 to supplement the CBD on biosafety measures.

Taking into consideration of the potential risks posed by these LMOs, which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biodiversity, as well as the risk to human health, the Precautionary Principle became one of the main agenda of the Protocol. Article 1 of the Cartagena Protocol articulates the objective of the Protocol by reinforcing and reiterating the Precautionary Principle of the CBD (Shaik *et. al,* 2009) as follows,

> *"In accordance with the precautionary approach contained in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Protocol is to contribute to ensuring and adequate level of protection in the field of the safe transfer, handling and use of living modified organism…."*

The enactment of the Biosafety Act 2007 (BSA 2007) took place four years after Malaysia ratified the Cartagena Protocol, which was first signed in 2000. Gazetted on 30 August 2007, as reflected from its preamble, the BSA 2007 was enacted among others to implement the CBD and Cartagena Protocol; to uphold the Precautionary Principle approach as contained in Article 1 of the Cartagena Protocol (by providing that when there are threats of irreversible damage, lack of full scientific evidence may not be used as a reason not to take action to prevent such damage); and to provide for matters connected therewith (including matters related to Liability and Redress on Transboundary Movement of the LMOs etc.)

The BSA 2007 has undergone two amendments in 2019 on the First and Third Schedule of the Act relating to Board Members and Enforcement Officers, respectively. However, there have been no major revisions done since its enactment thirteen years ago despite some obvious loopholes that may have made the Act ineffective, and less appealing to the public. For instance, there is lack of avenue for private individuals to claim for damages resulting from transboundary movements of LMOs, as pointed out earlier by Murad and Talaat (2014). While Section 12(2) only covers the fault of the "offender" indicating that only criminal liability attached to the wrong committed by the offender, there is no avenue provided under the Act for a private individual that has been affected by the LMOs should they escape. It was proposed that the provisions on civil liability should be developed and incorporated in the BSA 2007 for private individuals affected by the LMOs brought in by the importers.

Since the Act was first passed, there have been many developments at the international level relating to biosafety, which should be correspondingly reflected and updated in the BSA 2007. The Nagoya - Kuala Lumpur Supplementary Protocol on Liability and Redress, which was adopted on 15 October 2010 at the 5th meeting of the Conference of the Parties and entered into force on 5 March 2018, requires that response measures are taken in the event of damage resulting from LMOs (or where there is sufficient likelihood that damage will result if timely response measures are not taken). Furthermore, in line with the above suggestions by Murad and Talaat (2014), this Supplementary Protocol also includes provisions in relation to civil liability by obliging State Parties to continue to apply existing legislation on civil liability, which refers to BSA 2007 (or alternatively develop a specific legislation) concerning liability and redress for material or personal damage resulting from LMOs.

These developments obviously require urgent revision of the Act. Revision of the current BSA would be more cost-effective, less time-consuming and more practical as compared to developing a new legislation that specifically provides on matters concerning civil liability, and liability and redress resulting from LMOs, for material or personal damage associated with damage to the conservation and sustainable use of biodiversity.

Access to Biological Resources and Benefit Sharing Law

The other supplementary CBD Protocol i.e. the Nagoya Protocol on Access and Benefit Sharing (ABS) was adopted on 29 October 2010 in Nagoya, Japan although it was first initiated in Kuala Lumpur. This Protocol was adopted 10 years later than the Cartagena Protocol on Biosafety due to many reasons, most significantly was the tussle between the CBD and WTO TRIPS involving traditional knowledge on the associated use of genetic resources (TK) and Intellectual Property Rights (IPRs). While the ABS principles in the CBD promotes for Prior Informed Consent and Mutually Agreed Terms provisions on benefit sharing and recognition given to owners of TK, the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights 1994 (TRIPS), on the other hand, gives precedence to private rights over public rights. TRIPS allows the recognition of patents & other IPRs by using biological resources and TK without Prior Informed Consent, provisions on benefit sharing, nor due recognition given to owners of such TK.

The Nagoya Protocol 2010 was not signed by Malaysia but was finally acceded to on 5 November 2018, and Malaysia has officially become a Party to the Protocol on 3 February 2019. The Nagoya protocol was intended to provide greater legal certainty regarding the CBD's provisions on Access and Benefit Sharing (ABS). The Protocol obligates national level ABS measures to provide for four main thrusts namely: -

1. The fair and equitable sharing of benefits arising from the utilization of genetic resources with the contracting party granting the access to genetic resources must be with Prior Informed Consent;
2. Utilization includes R&D on genetic or biochemical composition of genetic resources, its subsequent applications, and its commercialization;
3. Sharing is subject to Mutually Agreed Terms; and
4. Benefits may be monetary or non-monetary in the forms of royalties, sharing of research results, knowledge transfer or capacity building.

Despite not signing the Nagoya Protocol earlier, Malaysia has considerably adopted its provisions in the enactment of the Access to Biological Resources and Benefit Sharing Act 2017 (ABS Act 2017). This fact can be reflected from the provisions contained in the Act itself, as well as its preamble, which reads as follows,

> *"Act to implement the Convention on Biological Diversity and any protocol to the Convention dealing with access to biological resources and traditional knowledge associated with biological resources and the sharing of benefits arising from their utilization and for matters connected therewith."*

The ABS Act 2017 clearly draws upon much of the philosophy underlying the Nagoya Protocol, which can be reflected from the following provisions of the Act: -

1. Section 4 extends the term 'biological resources' to include 'derivatives', which covers any form or part of the genetic resources, organisms, or microorganisms. The term was also extended to include the populations and any other biotic component of an ecosystem with actual or potential use or value for humanity.
2. Part III of the Act regulates the obtaining of "access" to biological resources and taking them for R&D purposes from their natural habitat or a place where they are found, kept, or grown.
3. Section 23 contains the Nagoya Protocol main thrusts by providing that an applicant must have obtained the Prior Informed Consent of any relevant indigenous and local community for access to biological resources on land to which the community has a right as established by law and TK associated with the resources held by the community.

4. Section 31 prohibits any person from applying for IPRs (whether in or outside Malaysia) in relation to the biological resources or TK associated with biological resources accessed without the written consent of the Competent Authority, which is detailed out in 1st Schedule as the States or the Federal Territories.

Development on Other Related Laws on Biodiversity

In 2004, the Protection of New Plant Variety Act was enacted under the auspice of Article 27.3(b) of TRIPS. As also a member of WTO and a Party to TRIPS, Malaysia is obliged to comply with the treaty, and has consequently enacted this plant variety protection Act, which came into operation on 20 October 2008. The objectives of the Act as stated in its preamble, are among others to provide for the protection of the rights of breeders of new plant varieties, and the recognition and protection of contribution made by farmers (including local and indigenous communities) towards the creation of new plant varieties. Although this Act was enacted to implement the national obligations under TRIPS, the fact that the contributions made by the local and indigenous communities were given due recognition may be seen as a positive step towards achieving sustainable development, as envisaged by the CBD.

There is also another biodiversity-related law passed after the CBD was signed and ratified by Malaysia. The International Trade in Endangered Species Act 2008 (INTESA 2008) was passed to control international wildlife trade and to implement the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Since flora and fauna are major parts of biodiversity, the enactment of INTESA 2008 hugely contributes towards biodiversity conservation in Malaysia.

Malaysia has also duly carried out her obligations to achieve the objectives of the CBD by revising her existing piecemeal legislations related to biodiversity to enhance measures for preservation of threatened species as well as their habitats. A significant milestone is the Wild Life Conservation Act 2010, which were enacted to repeal and replace the earlier Wildlife Protection Act 1972 (WCA 2010). The other biodiversity-related laws revised include the Environmental Quality Act 1974, Fisheries Act 1985, National Parks Act 1980, and Continental Shelf Act 1966. Correspondingly, the numbers of protected areas in Malaysia have also increased to meet the obligations under the CBD and its Aichi Target 11, through the designation of state and national parks, both marine and terrestrial.

Although Malaysia is yet to have her own Biodiversity Act, which can cater for a wider and more comprehensive scope of living organisms, the existing sectorial laws have been considerably effective in protecting biodiversity in the country. Despite the announcement in April 2016 by the then Minister of Natural Resources and Environment that Malaysia was introducing a "holistic biodiversity law" for environmental protection aimed at filling the gaps and marry existing laws into a new and comprehensive Act (The STAR, 2016), nothing has yet come out to date. The question whether the proposed 'holistic biodiversity law' would only provide measures for preservation of threatened species since the measures for safeguarding traditional knowledge and prevention of bio-piracy are already covered under the ABS Act 2017 remains unknown.

Be it as it may, this proposed law must also take into consideration of the jurisdictional boundaries between the federal and states authorities enshrined under the Ninth Schedule of the Federal Constitution. There is also a lesson to be learnt from the Brazilian Biodiversity Law 2015 (Law 13123), which failed to adequately consult with the indigenous communities prior to its enactment, leading to lack of protections on indigenous rights (Wrench, 2015). Malaysia would however fare better if Principle 4 of the Second NPBD, which clearly emphasises on stakeholders' consultation through participatory planning and decision making, is translated into its enabling legislative and administrative measures.

The Gaps in Effective Biodiversity Conservation

Apart from the loopholes in the BSA 2007, which requires urgent revision, the works on biodiversity conservation in Malaysia is still far from complete. Notwithstanding the Second NPBD and the presence of the above-discussed corresponding laws, there are still gaps and barriers to overcome before meeting the national goals and targets set by the Policy. As noted recently by Tong (2020), despite meeting her international commitments to the CBD by fulfilling the requirements for necessary policies, strategies and action plans, biodiversity governance in Malaysia is still complicated with regards to the delivery of the Policy.

Citing the involvement of multiple ministries and agencies, which was further complicated by the volatile political environment during these recent years, Tong continues to lament on the loss of forest cover and threatened species. Loss of 34% of tree cover from 2002-2019, as stated on the Malaysian Dashboard by Global Forest Watch (2020), may be deemed as a catastrophe not only to the biodiversity but also to the human population due to ecological functions of forests as carbon storage, in nutrient cycling, as well as in water and air purification, among others.

Quoting on Malaysia's infamous IUCN ranking with the fourth highest amount of threatened species on IUCN Red List of Threatened Species dated March 2019, Tong (2020) further argues that in the absence of monitoring mechanisms to measure programmes' effectiveness, implementation and enforcement are often conducted without knowing and linking the outcomes. Sadly, this is happening despite the global development of biodiversity management. Jurisdictional boundaries between the ministries and enforcement agencies, and lack of coordination between them, further amplify the botched implementation and enforcement.

Earlier on, Ariffin (2015), in her study on enforcement of wildlife crime in Peninsular Malaysia, argued that insufficient capacity of enforcement agencies, lack of inter-agency and public cooperation, and lack of political-will as the contributing factors to ineffective enforcement. Almost similar findings have subsequently been discovered in East Malaysia in her more recent study on wildlife crime enforcement, where she noted that insufficient inter-agency coordination and cooperation are commonly caused by lack of data-sharing mechanism, differing agency structures, and unclear chain of command (Ariffin, 2018).

Conclusion

It may be safe to note that Malaysia is working hard towards meeting her obligations under the CBD, most especially through the Second NPBD that emphasises the need for continued conservation, sustainable utilisation and the sharing of benefits from biodiversity in a fair and equitable manner. After the first NPBD 1998 was revised, and reinforced with the Second NPBD, Malaysia has basically fulfilled her obligations under the CBD through the enactment of the BSA 2007, catering on biosafety but is obviously outdated and do not correspond with the international development, and ABS Act 2017, catering on access and benefit sharing on biological resources. These are further supplemented with the enactment of the Protection of New Plant Variety Act 2004, INTESA 2008 and WCA 2010, and revision of other biodiversity-related piecemeal legislations.

Nonetheless, the work is far from over. The laws, particularly those directly enacted to fulfil the obligations under the CBD, must constantly be updated and correspond with the development at the international level. Furthermore, threats from anthropogenic sources, like population increase and socio-economic changes, are causing immense pressure on earth where global warming, sea level rise, pollution and unsustainable consumption are among the pressing catalysts to losing our biodiversity. Massive devastation of biodiversity is a significant manifestation on how biodiversity conservation must be taken more seriously and holistically. Loss of biodiversity would mean loss of lives on earth, the living resources that

green the earth and provides food security to the humanity.

Malaysia must therefore continue to arm herself with sufficient legal and administrative mechanisms to protect her biodiversity, which is the 12th largest in the world, and a comprehensive biodiversity legislation may perhaps be the best solution. Likewise, overcoming the jurisdictional boundaries and coordination problem in law enforcement can be addressed through Memorandum of Understanding or Agreements, or joint policymaking, between the agencies. Inter-agency cross-over training and law enforcement assignment to facilitate information communication and on-site consultation, as suggested by Ariffin (2018), could be another effective mechanism for coordination.

The Second NPBD may not be without fault. However, this Policy was carefully drafted over numerous stakeholders' consultation to correspond with the Aichi Targets and fulfil Malaysia's obligations under the CBD. It provides clearer targets, actions, and timelines for implementation, making it time-bound and quantifiable, which would purportedly facilitate in meeting the national goals and targets. The calls for active participation by all stakeholders through its five salient Principles must be echoed through effective corresponding laws and administrative measures in biodiversity conservation. Institutional capacity of the enforcement agencies must also be strengthened to increase effectiveness in enforcing these laws.

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