

Access and Benefit Sharing: National Law and Islamic Perspective

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Abstract: This article aims to discuss national laws on Access and Benefit Sharing (ABS). An overview of ABS, the background by which ABS was conceived is presented along with the framework convention from which it originated from. The discussion shall encompass overview of ABS, the core features of an ABS law, relevancy of ABS implementation in Malaysia and a study on the Malaysian draft law on ABS. In doing so, documents on ABS such as the Bonn Guidelines, legislations of various countries (for comparative purposes) and the draft protocol on ABS shall be discussed together with the Islamic perspective on ABS.

Key words: Environmental Law • Access and Benefit Sharing • International Environmental Law • Sharia

INTRODUCTION

Environmental issues are mostly trans-boundary in nature. It goes across man-made national border into another and the global commons. The international nature of environmental issues demand for it to be addressed on international level which allows countries to find a common understanding on the matter, thus making them able to make concerted effort to address the issues within their national boundaries. The Earth Summit in 1992 marked the international communities' concern and effort on environmental issues. It resulted with a series of documents, one of them being The Convention on Biological Diversity (CBD).

CBD is an internationally binding legal instrument. It provides three main objectives, which are the conservation of biological diversity, sustainable use of its components and fair and equitable sharing of benefits arising from genetic resources. The convention recognizes the importance of benefit sharing as a mechanism that will help environmental preservation and in the same time promote sustainable development. In general, this mechanism allows countries to receive benefits from any genetic resources found within their country that is then used for the purpose of commercialization and research. It is interesting to note that though this mechanism was formulated internationally, it requires contracting parties to the CBD to implement national law on it. This mechanism is called Access and Benefit Sharing (ABS).

The Need of Mechanism: There are some areas in the world that have high amount of biodiversity and usually these areas are within the borders of developing countries. These countries act as providers of genetic resources and also the traditional knowledge related to genetic resources. The users of genetic resources, on the other hand, are mostly the developed countries by way of their huge corporations and companies. This provider-user relationship vice versa between the developing and developed countries has existed for a long time and users have benefited from this activity through commercialization of genetic resources-based products. Billion dollars of profit had been made possible by this activity. In 2007 in the United States alone its pharmaceutical companies obtained profit of US\$ 315 billion [1], a sum that was much higher than the national economy (GDP) of some developing countries. The situation is all too different for the providers. Though their resources and traditional knowledge are tapped, they rarely see the benefits because there is no mechanism that requires fair and equitable sharing of benefits between the parties.

To correct this imbalance ABS is much needed. However it must be noted that genetic resources and traditional knowledge related to genetic resources must never be considered as a commodity [2]. It is not about trading but as compensation for the providers who provides them. The main purpose of this "compensation" is to provide the necessary means and funding for the providers so that their national biodiversity can be

preserved and protected by way of sustainable development. On the context of indigenous and local communities that provides traditional knowledge, benefits from ABS can be considered as incentive so that these communities will preserve the environment and maintain continuous use and develop their knowledge so that it will be preserved for scientific research.

Overview: Abs under CBD: The ABS mechanism is a set of rules and principles governing the extraction and use of genetic resources and associated traditional knowledge. Ghose [3] mentions that “access refers to the ability of individuals to acquire or use genetic resources found in plant and genetic resources for a multitude of purposes, not limited to commercialization. However, benefit sharing issues are explicitly within the context of commercialization; financial incentives to access plant and genetic resources for commercialization are substantial, particularly if there is sufficient demand for the resultant product”.

The CBD recognizes the need for ABS however it does not provide the definite interpretation or procedure on the matter. On this Azmi [4] wrote that CBD “is a framework convention and its articles, although specific in its intentions, are vague as to the actual obligations placed on party states”. Though CBD as a framework convention is lacking in certain areas but it is overcome by the active participation of the parties in the COP (Conference of Parties) meetings. This active participation so far has allowed the establishment of a protocol, a guideline on ABS and soon to be protocol on ABS.

On ABS the recognition of CBD on the matter is clear. It is provided in one of the objectives of CBD that ABS is to provide for “the fair and equitable sharing of

the benefits arising out of the utilization of genetic resources...by appropriate access to genetic resources”. There are four main relevant articles in CBD on ABS namely articles 8(j), 15, 16 and 19. These articles give the background or framework for the ABS regime and it cover matters ranging from sovereignty of states over their genetic resources, facilitation of access to genetic resources, sharing of benefits and the recognition of indigenous-local communities on traditional knowledge (For a summary of the articles see Table 1).

From the summary above it is clear that the main article on ABS is art. 15. However to rely on the article itself is not enough for parties to develop their ABS regimes. To address this matter COP6 deliberated on art. 15 interpretation and arrived at decision VI/24. This decision brought forth the Bonn Guidelines.

The Bonn Guidelines is a set of voluntary provisions. There is no obligation on party States to translate the guidelines into national law. The aim of the guidelines is to assist governments and other stakeholders in implementing ABS into their national law. It also expands the CBD principles on ABS and it defines the roles of stakeholders and the stages in the proposed ABS procedure. The Bonn Guidelines are structured are as follows:

- General provisions – Section 1
- Roles and Responsibilities – Section 2
- Stakeholder Participation – Section 3
- The ABS process – Section 4
- Other provisions – Section 5
- Suggested elements for material transfer agreements – Appendix 1
- Stipulated conditions for monetary and non-monetary benefits – Appendix 2

Table 1: Summary of the Main Relevant Articles on ABS

Article	Summary
8(j)	Parties shall promote wider application of the knowledge of indigenous and local communities with their approval and involvement AND encourage equitable sharing of benefits from utilization of such knowledge.
15	<ol style="list-style-type: none"> 1. States have sovereign rights over their resources AND have authority through national governments to determine access to genetic resources (GR). 2. Parties shall endeavour facilitate access to GR 3. Articles 15, 16 and 19 apply only to GR acquired in accordance with CBD. Eg they do not apply to those obtained prior CBD or from non-parties 4. Access to be on (Mutual Agreed Terms) MATs 5. Access subject to Prior Informed Consent (PIC) of Provider (may also include stakeholder as determined by Provider) 6. User shall develop and carry out scientific research based on the GR provided by Provider. This should be done if possible together with the Provider within the providing country. 7. Parties shall take measures (legislative, administrative or policy) with the aim of sharing equitably the results of research and commercial benefits with the Provider, which sharing shall be on MATs
16	3. Access and transfer of technology using GR provided by the Provider
19	<ol style="list-style-type: none"> 1. Effective participation of providers in research on GR they provide 2. Priority access by countries providing GR to the research results and benefits, depending on MATs

Source: Author

Table 2: Legislative Strategy Options on ABS

ABS Legislative Strategy Options	Countries Pursuing these Options
General Environmental Framework Laws (which only enable future legislation on ABS)	Gambia, Kenya, Malawi, Republic of Korea, Uganda
Framework sustainable development, nature conservation or biodiversity laws (which establish some ABS principles but require further legislation)	Costa Rica, Eritrea, Fiji, Mexico, Peru
Specific stand-alone national laws or executive orders that regulate access to genetic resources	The Philippines and Sarawak (state level)
Modification of existing laws and regulations such as those governing wildlife, national parks, forestry and fisheries to include ABS provisions	Nigeria, Malaysia and Western Australia (state level)
Regional framework legislation (establishing common principles and procedures but requiring follow up legislation)	Andean Pact (Bolivia, Columbia, Ecuador, Peru and Venezuela)

Vivas [5] discussed on the salient provisions of Bonn Guidelines. He states that it covers the facilitation of PIC of both the national government of the country of origin of the resource for transmittal as well as indigenous and local communities, the development of MATs to facilitate legal certainty and the minimization of cost and the specification of benefits the collector will provide and situations where the collector may transfer the collected genetic resources to another party.

True to its name, the Bonn Guidelines give party states a guideline of optional provisions to be implemented under their respective national laws. However it lacks the binding effect that compels parties to do so. Most countries seem to ignore the guidelines except for Australia which adopted most of the guidelines fervently [6]. Thus the need arise for an international document that is binding in nature on ABS. In COP 10 parties to CBD are expected to adopt a legally binding protocol on ABS which will clear all the uncertainties on the subject matter. At the time this article is written, the discussion on the so-called Nagoya Protocol is still ongoing.

Relevance of National Abs Law in Malaysia: Malaysia is recognized as one of the mega bio diverse countries. The diversity in flora and fauna has enabled Malaysia to earn a prestigious spot as one of the 12 mega biodiversity countries in the world. The same goes to most of the countries situated between the two tropics. Majority of genetic resources that are of interest to industry are located in these countries. Myers et al (2001) states that 44% of all species of higher plants are confined to 25 hotspots of biological diversity. These 25 areas only account for 1.4% of available land on Earth.

Apart from its rich biodiversity, Malaysia is also the home of various tribes of indigenous peoples and traditional communities, which hold and practice traditional knowledge. Nijar [7] states that this knowledge was developed based on their creativity, understanding and utilization of the rich biodiversity abounds around

them and have helped healed, fed and clothed the world.

Having a rich biodiversity and relevant traditional knowledge means that Malaysia has an obligation to fulfill under the CBD which it had ratified 22 September 1994. The obligation is that Malaysia “shall endeavour to create conditions to facilitate access to genetic resources”. If Malaysia is able to create this “condition” by giving access to the country’s genetic resources and traditional knowledge to users then Malaysia including the traditional knowledge bearing communities will be entitled to receive benefits from it. This is only possible if Malaysia have a clear legislation on this matter hence the need of a proper national ABS law.

What Kind of National Abs Law?: Art. 15(2) of the CBD require that contracting parties shall endeavour to create conditions to facilitate access to genetic resources. The term “endeavour” includes enacting national laws with regard to ABS matters. To do so, the states are given suggestive approach by the Bonn Guidelines. As discussed above implementation of the Bonn Guidelines are voluntary in nature. Party states have no legal obligation under the international law to adopt it. The Australian national and its Commonwealth laws on ABS are example of a positive adoption of the suggestion under the Bonn Guidelines. On the other hand, other countries have the tendency to develop their own unique or sui generis legislation. These unique legislations give us an insight on how the ABS regime is implemented via various legislative strategy options. (Table 2).

From the above we can see that ABS can be implemented in the national law in a variety of ways. A party state may adopt any strategy they prefer. Malaysia for the time being has an extensive number of environmental based laws which provide room for ABS implementation in them. In my opinion, though Malaysia has this option the best way to implement ABS nationally is by having a specific standalone legislation that deals with the matter. A specific law will enable a focused administration and compliance of the ABS regime.

Table 3: Current List of Countries and their respective National Laws which implemented ABS Measures

No.	List of Countries	National Laws
1	Afghanistan	Environment Act
2	Australia	<ul style="list-style-type: none"> • Environment Protection and Biodiversity Conservation Act 1999 • Environment Protection and Biodiversity Conservation Amendment Regulations 2005 (No.2) • Environment Protection and Biodiversity Conservation Regulations 2000 • Northern Territory of Australia Biological Resources Act 2006 • Queensland's Biodiscovery Act 2004
3	Bhutan	Biodiversity Act of Bhutan
4	Bulgaria	Biological Diversity Act 2002
5	Croatia	Nature Protection Act
6	Gambia	National Environment Management Act 1994
7	India	<ul style="list-style-type: none"> • Biological Diversity Rules 2004 • The Biological Diversity Act, 2002
8	Kenya	<ul style="list-style-type: none"> • Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006 • Environmental Management and Co-ordination Act, 1999
9	Lesotho	Environmental Act, 2008
10	Malawi	<ul style="list-style-type: none"> • Environment Management Act (No. 23 of 1996) • Procedures and Guidelines for Access and Collection of Genetic Resources in Malawi
11	Malaysia (State Level)	<ul style="list-style-type: none"> • Sabah Biodiversity Enactment 2000 • Sarawak Biodiversity Centre Ordinance of 1997 and amendment of 2003. • The Sarawak Biodiversity Regulations 2004
12	Malta	<ul style="list-style-type: none"> • Convention on Biological Diversity (Incorporation) Regulations, 2002, Legal notice 160 of 2002. • Flora, Fauna and Natural Habitats Protection Regulations, 2006, Legal Notice 311 of 2006, as amended.
13	Mexico	General Law of Ecological Balance and Environmental Protection
14	Mozambique	Decree No 19/2007 on the Regulation on Access and Sharing of Benefits arising out of the utilization of Genetic Resources and Associated Traditional Knowledge.
15	Norway	<ul style="list-style-type: none"> • Act No. 100 relating to the management of biological, geological and landscape diversity (Nature Diversity Act) • Act No. 37 relating to the management of wild living marine resources (Marine Resources Act) • Act No. 9 on patents (Norwegian Patent Act), as amended in 2004 and 2009.
16	Philippines	<ul style="list-style-type: none"> • Executive Order 247 Guidelines on Bioprospecting • Guidelines for Bioprospecting Activities in the Philippines • Implementing Rules and Regulation (IRR) of Republic Act No. 9147 - Wildlife Resources Conservation and Protection Act • Republic Act No. 8371: The Indigenous Peoples Rights Act of 1997 • Republic Act No. 9147: Wildlife Resources Conservation and Protection Act • Rules and Regulations Implementing Republic Act No. 8371, otherwise known as the "Indigenous Peoples' Rights Act of 1997"
17	Portugal	Decree-Law No. 118/2002
18	South Africa	<ul style="list-style-type: none"> • National Environmental Management: Biodiversity Act 2004 • Patents Amendment No. 25 of 2005. • Regulations on Bio-Prospecting, Access and Benefit-Sharing
19	Uganda	<ul style="list-style-type: none"> • National Environment (Access to Genetic Resources and Benefit Sharing) Regulations, 2005 • National Environment Statute, 1995
20	Vanuatu	Environmental Management and Conservation Act No. 12 of 2002
21	Zimbabwe	Environmental Management Act, Chapter 20:27

Currently, Malaysia has no federal legislation with regard to ABS. The states of Sabah and Sarawak however have their own laws that implemented ABS measures. As a country recognized as a mega bio diverse, Malaysia's reservation in enacting a law on ABS is baffling. Though the Malaysian government acknowledges the importance of access to genetic resources and traditional knowledge related to it and benefit sharing no legislative effort has been done to address the matter. So far, in the context of

implementing ABS measures in national law, Malaysia except for Sabah and Sarawak is way behind other countries which have done so. (Table 3)

Main Features of National Abs Law: The main features of a national ABS law should address issues as follows:

- Scope of Resources
- Competent National Authority
- Prior Informed Consent

Table 4: Scope of Resources

National Law	Scope
Australia Environment Protection and Biodiversity Conservation (EPBC) Regulation	Rather than using “access to genetic resource” The EPBC Regulation 8A.03 uses “access to biological resources”. It means the taking of biological resources of native species for research and development on any genetic resources, or biochemical compounds, comprising or contained in biological resources...
India The Biological Diversity Act	The act uses the term “obtain any biological resources”. Sec.2 of the Act defines “biological resources” as plants, animals and micro-organisms or parts thereof, their genetic material and by-products (excluding value added products) with actual or potential use or value, but does not include human genetic material.
Sabah Sabah Biodiversity Enactment	Sec.15 uses “access to biological resources”. Sec.2 states that it includes genetic resources or materials of plant, animal or microbial origin or any other biotic components of the ecosystem, with actual or potential use or value for humanity.
Philippines Implementing Rules and Regulation	Rule 9.1 uses the term “collection of by-products and derivatives”.

- Mutually Agreed Terms
- Benefit Sharing
- Traditional Knowledge Associated to Genetic Resources
- Compliance Mechanisms

From the seven main features three of them are the core principles of ABS system, which are prior informed consent, mutual agreed terms and benefit sharing. Most authors on this subject seem to put emphasis on these core principles. However some authors have also stretched their discussion to include the other features as well. Each of these features will be discussed respectively.

Scope of Resources: The scope of resources which access is to be regulated is outlined briefly in the CBD. The CBD in Art.15 only provides limited coverage that is on genetic resources alone. Art. 2 defines genetic resources as “genetic material of actual or potential value”. Note that Art.2 also provides definition for “biological resources” which is broader than the one covered in Art. 15. Art. 2 defines biological resources as “genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity”. The question that arises is why Art.15 covers only genetic resources and not biological resources?

There seems to be ambiguity in the scope of what ABS should cover. Prasad Oli [8] made a point on this matter. He states that “there is underlying indistinctness between biological and genetic resources among the policy makers and the communities. Traditionally biological resources such as seed, or any parts of plants or animals are freely commercialized which contain genes. This means accessing biological resources naturally accesses genetic resources. How genetic resources can be accessed separately from biological resources is not

clear. Because of this it has become ambiguous this notion has limited the value of developing meaningful ABS policy”.

The second argument on scope of resources that should be covered is “derivatives” of genetic resources because CBD does not cover derivatives. ten Kate and Laird [9] state that in pharmaceutical sector most commercial products use modified genetic resources (derivatives) and because of this some of access agreement covers GR and its derivatives and there are also national legislation that go beyond the definition of GR provided by the CBD by expanding their scope to cover biological resources and its derivatives. On the other hand Burton [10] criticizes the expansion genetic resources definition. He argues that “to expand the ambit of genetic resources to consider derivatives of organisms...will have unintended consequences”. This he said will affect ordinary trade in products made from nature.

Though there are conflicting views on how the scope should cover, in the end it all falls on the state. Since countries have sovereignty over their resources, as recognized by CBD, they may choose to regulate access to a broader or narrower range of resources than those encompassed by the term “genetic resources”. Australia for example adopted a narrower interpretation of the scope by excluding non-native species. Other countries however have the tendency to adopt the broader interpretation by using the term biological resources instead of genetic resources. (Table 4)

Competent National Authority: On this Schrijver [11] in his thesis mentioned that “The trends in international environmental law.... have given rise to the obligation of States not only to manage their natural wealth and resources in such a way as to avoid significant harm to (the ‘sovereign’ territory of) other States, but also to

manage their natural wealth and resources properly for the sake of their own people, including future generations”.

It is an accepted concept of sovereignty that a state has the power to independently regulate its own affairs. Sovereignty here does not mean that the state owns the environment and natural resources but it means that state has the power to regulate ownership. CBD under Art. 15(1) vests sovereignty over biological resources and traditional knowledge in states. Thus the ownership of biological resources is determined by the state through national law.

The issue of sovereignty, authorities and access go hand in hand. On this some states have enacted laws which create Competent National/State Authorities (CNA). It is important that these authorities are given functions to facilitate access (as per Art 15(2) CBD), to decide on MATs and those relevant to issue of environment, biodiversity and sustainable use of resources.

Prior Informed Consent and Facilitation of Access: Art 15(5) CBD provides that CNA may provide access to genetic resources if prior informed consent fulfilled. Tully [12] states that prior informed consent “envisages information exchange, export notifications, global databases and the designation of national authorities. It commonly requires consent occurring before the activity in question, written documentation with full disclosure or realistically foreseeable risks and the informed consent of the actor”. The article requires the prior informed consent of contracting party providing genetic resources. It is an explicit permission of the authorities of the provider country that may be required before access or use of genetic resources.

However the term ‘unless otherwise determined’ within Art. 15(5) could suggest that if access measures are not instituted, then prior informed consent is not required. Alternatively, access is restricted and prior informed consent is required until a party legally determines otherwise.

To obtain prior informed consent, the accessing party needs to undergo procedures as prescribed by the providing country under its national legislation. The Bonn Guidelines provides further definition on prior informed consent, the stakeholders relevant to prior informed consent and the procedure for obtaining it.

Mutually Agreed Terms (MATs): MATs can be described as the “ABS Agreement”. It is the arrangement reached on terms and conditions of access and use of GR

Table 5: Possible Benefits under the Bonn Guidelines

Monetary	Non-monetary
1. Upfront payments	1. Participation in scientific research and development of GR
2. Research funding	
3. License fee	
4. Salaries	
5. Infrastructure	2. Sharing the findings of any benefits of such research and development
6. Joint ventures	
7. Joint ownership of IPR	

between the party seeking GR for research and development and perhaps commercialization and the party that would be able to supply such material. Not only that, stakeholders such as indigenous and local communities, government authorities and NGOs are also be relevant to take part in MATs.

Posey and Dutfield [13] define MATs as those agreements that “establish standards for the transfer of biological resources for research and possible commercialization in exchange for benefits to the party recognized as the supplier.... In exchange, MTAs usually grant the recipient of the material the right to apply for patents if any of the material has commercial potential”.

Benefit Sharing: The question that arises is what is fair and equitable benefit sharing? The term “fair and equitable” recurs four times in CBD in Arts. 1, 8(j), 15(7) and 19(2). However, it is not defined. This causes another ambiguity as to what it actually means. The CBD require providers to facilitate access. However, take consideration of the lopsided bargaining power or parties. The GR providers are obviously weaker than the companies and developed states and it is obvious who has the upper hand benefit sharing negotiation.

Under the CBD there are 2 modes of benefit sharing:

- Inter-State benefit sharing – Art 15(7)
- State to community benefit sharing – Art 8(j)

Furthermore, the Bonn Guidelines list possible benefits under monetary and non-monetary headings. (Table 5)

On the possible benefits, the draft protocol on ABS includes more non-monetary benefits compared to the ones prescribed under the Bonn Guidelines. If they are adopted then the scope of benefit to be shared will ultimately increase thus allowing for better collaboration between user and provider.

Traditional Knowledge & Indigenous Rights: Art. 8(j) CBD provides that parties are to respect and preserve the knowledge, innovations and practices of indigenous and

Table 6: National Laws and ABS Compliance Mechanisms

Country and National Law	Cancellation of permit	Offence and penalty
Uganda		
National Environment (Access to Genetic Resources and Benefit Sharing) Regulations 2005	/	/
Afghanistan		
Environment Act 2005	/	/
Bhutan		
Biodiversity Act of Bhutan 2003	/	/
Sarawak		
Sarawak Biodiversity Regulations 2004	/	
India		
Biological Diversity Act 2002		/
Biological Diversity Rules 2004	/	
Philippines		
Executive Order 247 Guidelines on Bioprospecting	/	
South Africa		
Regulations on Bioprospecting, Access and Benefit Sharing		/
Sabah		
Sabah Biodiversity Enactment 2000		/

local communities embodying traditional lifestyles, to promote their wider application and to encourage equitable benefit sharing.

Traditional Knowledge is an integral part of ABS. The use of Traditional Knowledge for commercial research and development are subject to ABS principles. It must take place with the approval and involvement of indigenous and local communities as well as sharing of benefits. Specific approach and arrangements for Traditional Knowledge protection may vary depending on various issues such as whether the knowledge at issue is held by limited number of communities or is widely disseminated in the region. The use of Traditional Knowledge might be rewarded through trust funds established at local or national level.

Bonn Guidelines paras. 17-19 suggest participation of stakeholders in ABS arrangements. Indigenous and local communities are recognized as stakeholders which involvement in ABS arrangement should be facilitated by parties to the CBD by way of appropriate consultative arrangements such as national committee where stakeholders representative are present.

The theme of indigenous peoples “self-determination” as provided in the UNDRIP may have an effect on ABS arrangement. One of the principles of self-determination is that indigenous peoples have the right to free, prior and informed consent (FPIC) on projects and activities that may affect their livelihood. The difference between FPIC and prior informed consent is obviously the latter does not have the word “free” in it. In this context, “free” means the prior informed consent given by them is not caused by or tainted with threat, oppression and undue influence.

Compliance Mechanisms: Compliance mechanism means enforcement of ABS arrangement. Bonn Guidelines paras 59-60 suggest that in the event of dispute parties to an ABS arrangement may settle dispute in accordance with the contractual terms and the applicable law and practices and in certain situation, use of sanction may be imposed. States have adopted their own compliance mechanism. Generally they are divided into two types of enforcement which are cancellation of permit of access and penalties that follows an offence (Table 6).

Comments on Selected National Laws

Sabah – Sabah Biodiversity Enactment 2000:

CNA: Sabah Biodiversity Council was established under Section 3 of the Enactment

Under sections 15-17 of the Enactment, application for access is discussed. It provides that any Collector who intends access shall apply access license from the Council. Here the term “collector” is defined as any ‘person’ seeking access to biological resources or associated knowledge. Public officers as collector are given exception. For PIC the collector is required to give information on the collector’s identity and details of proposed access activity. The application must be submitted to the Council together with an application fee (the amount shall be prescribed by the council).

On benefit sharing, the Enactment under section 23(1) does not cover monetary benefits. The only benefit mentioned is collaboration between the collector and a local collaborator that will participate together in the collection, research and development. Section 23(2) empowers the state to impose any other conditions on the application of access as it deems fit. This may be

interpreted that the state may require collector to enter into a monetary based benefit sharing as extra condition to be fulfilled under the access arrangement. This is an example of a vague provision that gives arbitrary power on the state to impose conditions.

Afghanistan – Environment Act 2005

CNA: National Environmental Protection Agency (NEPA)

Art 62 of the Act states that access to GR shall be subject to prior authorization of NEPA in the form of an access permit. The permit is to be applied for in writing together with the prescribed fee (the Act did not mention the exact fee but states “any prescribed fee”). Once applied NEPA will provide permit if only the access granted will not cause any detrimental effect to the environment, biodiversity etc. On PIC, the Act requires applicant to divulge information relating to identity, description of species sought and description of intended use of GR. The act also requires further information depending on whether the access for GR is in-situ or ex-situ.

On benefit sharing, the Afghan Act under Art.65 provides a clear requirement of both monetary and non-monetary benefits resulting from the access arrangement.

India – The Biological Diversity Act 2002 & Biological Diversity Rules 2004

CNA: National Biodiversity Authority (NBA), State Biodiversity Board (SBB)

The Act establishes the NBA and SBB. Both of these authorities act together in relation of granting access. The procedure in applying access is provided under the Rules. It provides under Rule 14 that application shall be made to NBA, who shall in turn consult with local bodies such as SBB. In India in some states local bodies include village authorities called the *Panchayat* which have been recognized by the Indian Constitution as ‘authorities’. Thus in some states in India, application for access shall go through 3 levels of authorities. On one hand it is good for protection of local communities however on the other hand it causes a procedural burden that may adversely disrupt facilitation of access. Rule 14(2) is clear on the application fee where fee of ten thousand rupees is imposed. On PIC, Rule 14 requires applicant to divulge information on identity and access activities in a prescribed form know as Form I of the Rules. The form also contain a statutory declaration part that requires applicants to declare that the collection of resources shall not affect sustainability, not entail any environmental impact, not pose any risk to ecosystems and not adversely affect local community.

The Indian laws are quite specific, concise and exhaustive on benefit sharing matters. Rule 20 provides the criteria for equitable benefit sharing. It starts with the formulation of a guideline that describes the benefit sharing formula which covers both monetary and non-monetary benefits. On the latter, the rules even prescribed benefits not prescribed by the Bonn Guidelines such as education, awareness raising activities and institutional capacity building. Quantum of monetary benefit shall be determined by various circumstances related to the access arrangement. The rule also establishes a National Biodiversity Fund for the purpose of depositing monetary benefits that accrue from biological resources accessed from unidentified individuals or organizations.

Australia – Environment Protection Biodiversity Conservation Act 1999

CNA: Director of Genetic Resources Management Policy within the Australian Department of Environment, Water, Heritage and the Arts.

Application of permit for access is made towards the CNA, either online or in writing. If access sought is for a commercial purpose, then the permit fee is AUD\$50. Access for non-commercial purpose such as taxonomy is free. The CNA will approve the permit for a commercial purpose if the collection causes no environmental harm and the applicant has entered into a benefit sharing agreement. On the other hand access for non-commercial purpose does not require a benefit sharing agreement. However a statutory declaration with regard to the non-commercial access is required. In the declaration the applicant undertakes to enter into a benefit sharing agreement if he later wishes to commercialize.

On benefit sharing of indigenous peoples, the Australian government of CNA does not interfere in such decisions or secure benefits for itself. All benefit sharing arrangements are determined by the indigenous peoples themselves.

DISCUSSION

For the time being there is no federal legislation except for Sabah and Sarawak which have state level legislation that touches on ABS. It is in my opinion that should Malaysia legislate on ABS, the MLABS should address the main features of national ABS law as discussed previously in this article.

First is the scope of resources. Malaysia has a huge potential to become provider of genetic resources and to receive benefits from such activity. The question now is should the scope of resources be extended or narrowed?

Australia narrowed their definition of resources that is to cover resources native to Australia only. Other countries seem to expand the scope that covers biological resources and even derivatives of genetic resources. Malaysia may adopt the narrower scope of resources in order to provide better coverage on our resources. However it can be argued that that expansive scope of resources is not in line with the spirit of CBD. Here, though the CBD is a binding international instrument, the power to legislate rests under the States. Thus Malaysia need to make a stand as to what its national law on ABS covers.

Secondly is the competent national authority. Here the national law must prescribe the best system of CNA in order to facilitate ABS measures. Should the Malaysian CNA come in the form of a federal department under a Ministry, State Authorities or a body corporate for better capacity, management and transparency? Whatever the form is the CNA must act as the focal point of ABS activities. To do so, capacity building is very important and it is a consolation that party states may seek international funding from developed nations to do capacity building¹.

Thirdly, a proper procedure for prior informed consent must be adopted. It must “facilitate” access rather than impede. Prior informed consent must come from relevant stakeholder i.e. indigenous and local communities or their representatives, NGOs and ultimately the CNA. In the Philippines, they have a system of PIC certificates with regards to indigenous community consent. User or collector is deemed to have obtained PIC when they give to the CNA the certificate signed by representative of the community². This method has been criticized because there is a tendency that these certificates are acquired by way of forgery, threat and undue influence³. Perhaps Malaysia should avoid PIC certification and develop a PIC system that allows each stakeholder to be equally and rightfully represented.

Fourthly, the mutual agreed terms (MATs) should ensure fair and equitable sharing of benefits. All stakeholders must participate in reaching MATs. Thus the Malaysian national law on ABS should provide a clear definition on “stakeholder”. The law should restrict stakeholders to include only those who have direct interest to the access of genetic resources and the benefit sharing that arise from it. Those who think that they are ‘stakeholders’ need not participate because too many

parties negotiating for the MATs will only impede the process of access thus not within the spirit of “facilitating access” as provided by CBD. There must be a provision that requires MATs to be decided within a reasonable time period.

Fifth is on benefit sharing. There are a lot of monetary and non-monetary benefits to choose from. We can just include them all in the MLABS. The most important part is not the ascertainment of possible benefits but the distribution of benefits. The Malaysian law on ABS should include a provision that lay down a procedure of distribution of benefits. This distribution must be transparent, accountable and fair and equitable. The provision also must prescribe the authority that will distribute the benefits. A question that needs to be answered is how should benefit be distributed directly from the collector to beneficiaries? For example, India established National Biodiversity Fund to facilitate distribution of benefits.

Sixth is on traditional knowledge. Though it is considered as one of the key theme in ABS most national laws surprisingly do not address the issue of traditional knowledge. Malaysia however by taking into consideration of our various and numerous indigenous peoples needs to recognize the importance of indigenous and local communities. Two national laws positively address Traditional Knowledge which are Australia under its EPBC Regulations 2005 and Bhutan under its Biodiversity Act of Bhutan, Water Sheep Year 2003. Bhutan goes to the extreme on indigenous people’s rights on traditional knowledge by giving protection to it by giving perpetual inalienable rights on the holders and place decision to grant access to traditional knowledge exclusively on the holders. Malaysia does not need to go to that extent as Bhutan but the most important thing is to give benefits to the indigenous communities whose knowledge has been used.

Seventh is on compliance mechanism. In deciding the best compliance mechanism Malaysia need to look at the highest objective of ABS that is sustainable development and biodiversity conservation. The main question should be on how to ensure sustainable development and biodiversity conservation? On this the law should ensure and requires user and collector of proper access and collection of in-situ genetic resources so that the activity conducted not cause damage to the environment.

¹ Arts. 20-21 CBD

² Philippines Republic act no. 8371 - An act to recognize, protect and promote the rights of indigenous cultural communities/indigenous people, creating a national commission of indigenous people, establishing implementing mechanisms, appropriating funds therefor and for other purposes.

³ Making FPIC work: Challenges and Prospects for Indigenous Peoples. Forest Peoples Programme. June 2007.

This can be seen in the Afghanistan law which requires parties that gained access to conduct their activity in a manner that it causes no effect to the environment. Malaysia can also adopt both enforcement regimes which are permits and criminal liability. The former allows CNA to ensure that users and collectors follow the rules of genetic resources extraction. The permit given should be cancelled if the situation warrants it due to non-compliance by the users and collectors. The latter allows CNA to protect national biodiversity by imposing criminal sanctions to those who access without proper authorization. This may curb problems of bio piracy. On criminal sanctions, we should refer to our own Wildlife Protection Act 1972 which provides criminal liabilities and sanction to person who took animals regarded as endangered species. Perhaps the MLABS should extend this to plants and genetic resources taken from plants as well, if possible.

Take note that in Malaysia, states have authority over lands and forest where most genetic lies as provided by the Federal Constitution. To enact a federal legislation on this matter will only be a political suicide for the federal government and risk the law to be challenged on ground of being unconstitutional. A way to overcome this is to adopt the method of our own National Forestry Act 1984, where the federal government legislates on the matter and then adopted in its entirety by the states.

In Islam, ownership is divided into three categories namely public ownership, personal ownership and government ownership. The first one means the ownership of public where a particular person or government cannot have exclusive ownership or rights on it. The second one means the ownership of the individual or group of individual (company or corporation) and nobody has any rights to interfere. The last one means the ownership of the government which is basically comes from the tax or war booty. However sometime there is no distinct demarcation between government and public ownership because what is seen to be public ownership is actually governed by the state. This is actually not an integral issue because the Sharia principle is clear that is government's policy relating to the people is actually for and must be commensurate with the public interest. Therefore the interference of the government, with good faith, on the public ownership is allowed as long as it upholds public interest.

Based on the categorization as above mentioned, the genetic resources in fact can be put under public ownership where it can be governed by the government based on the interest of public. It is put under such category because it is not a type of individual property

and it is not form of wealth collected by the government like tax and war booty. Besides the Prophet S.A.W said that, "human beings are partners in three sources namely water, pasture and fire". Even though the Prophet only restricted the wealth sharing into three, but actually those three represent wide spirit. The expressed restriction of the Prophet appeared because the Prophet addressed the situation of his time. When it comes to the modern day, the spirit of those three things can be extended by way of analogical reasoning. For example the fire may represent the petroleum and the pasture may represent the genetic resources.

Besides, Islam has provided guidelines in dealing with the wealth management like genetic resources. The deal on such kind of wealth must comply with the rules and objectives of Sharia in order to be recognized as Sharia compliant. Sheikh Tohir Ibnu A'shur has lined up several objectives in property dealings which must be taken into consideration by the government and foreign entity. The objectives as follow:

- Circulation of wealth.
- Clarity in property possession and ownership.
- Fairness in property ownership.

Meaning to say that anything related to the management of genetic resources, it must address the said objectives.

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