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An Insight into the Institutional Structure and Legal Framework to Implement the Nagoya Protocol on Access and Benefit Sharing (ABS)

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A B S T R A C T

Biodiversity is the variability of all life forms including the flora and fauna species, which provide potential human benefits. Genetic resources and species are unevenly distributed over the planet. *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization* to the Convention on Biological Diversity was adopted on 29 October 2010, in Nagoya, Japan and came into force from 12 October 2014. The present investigation on comparative study of institutional structure and legal framework of four selected countries *viz.* India, Mexico, Peru and South Africa possessing rich biodiversity and representing four continents was based on secondary data compiled from Nagoya Protocol and National Authority websites. The analysis of the reports of the sample countries revealed compliance with the obligations of the Nagoya Protocol by designating the National Focal Point (NFP) and Competent National Authority (CAN). Among the countries, India and South Africa have one CNA each, while Mexico (6) and Peru (4) with designated departments to provide more focused and better management of access and benefit sharing of the resources. India is the leading country with 1006 Internationally Recognized Certificate of Compliance with distantly followed South Africa with only 32 IRCCs. All sample countries have the unitary type of administrative set up to implement the protocol except India which has three tier structure with BMCs, State Biodiversity Board and National Biodiversity Authority. The parties under study have made use of their existing legislative provisions with amendments to implement the Nagoya protocol.

Introduction

Biodiversity is the variability of all life forms on earth including the flora and fauna species. Few places on earth are biologically rich as well as threatened. These resources provide potential human benefits and are crucial source of information to better understand the natural world. They are used to develop a wide range of products and services for human benefit. Genetic resources and species are unevenly distributed over the planet. Thus, the physical access to genetic resources needs to be facilitated and that the benefits obtained from their use must be shared equitably with the providers, this also

includes valuable traditional knowledge associated with genetic resources. There is a need to create incentives to conserve biological diversity, sustainable use of its components, and enhance the contribution of biological diversity to sustainable development and human well-being. To address this the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity was adopted at the tenth meeting of the Conference of the Parties on 29 October 2010, in Nagoya, Japan.

The Protocol entered into force on 12 October 2014. The objective of the Protocol is to provide appropriate access to genetic resources along with the fair and equitable sharing of the benefits arising from the utilization of genetic resources.

This study aims to understand the institutional structure, legislative, administrative and policy measures required to implement Nagoya Protocol by the countries.

Materials and Methods

An exploratory and descriptive research design was adopted for the study. Of the 124 countries that are party to the Nagoya Protocol of CBD, purposive sampling method was used to obtain a sample for the study. The countries with more biodiversity as detailed in Table 1 were considered for the sampling. These countries cover 10 per cent of the earth's surface but contain 70 per cent of the planet's biodiversity.

Among these countries, only 12 are parties to the Nagoya Protocol of CBD. They are Ecuador, Mexico, Peru, Venezuela, China, Indonesia, India, Philippines, Malaysia, Madagascar, Democratic Republic of Congo, and South Africa.

Based on the availability of the National Reports (NR) submitted to the ABS Clearing House and the number of IRCC the country possess, four countries were selected for the study. They were Mexico, South Africa, India and Peru, having representation of different continents.

The Biodiversity Index for these countries found to be very high ranging from 0.34 (Peru) to 0.52 (Mexico). The institutional structure, legislative and administrative framework of these countries were compared based on the secondary data collected from CBD and ABS Clearing House websites and official websites of National Authorities of the selected countries.

Results and Discussion

Institutional structure

To implement Nagoya Protocol, Parties have the key obligations contained in Articles 13 and 14 of the Protocol. Article 13 requires each Party to the Protocol to designate a National Focal Point (NFP), one or more Competent National Authorities (CNA) and to transmit their contact information to the Secretariat no later than the date of entry into force of the Protocol for the country.

Total of 174 National Focal Points were established, among them 121 are parties to Nagoya Protocol and are 53 non parties. Seventy countries have established Competent National Authorities with a total of 117 CNAs, as 13 countries have more than one CNA. Of these 70 countries, 65 are parties and 5 are non party countries.

Article 14 of the Nagoya Protocol requires Parties to make available to the ABS Clearing-House the following information.

Legislative, administrative and policy measures on access and benefit-sharing

information on the national focal point and competent national authority or authorities

Permits or their equivalent issued at the time of access as evidence of the decision to grant Prior Informed Consent (PIC) and of the establishment of Mutually Agreed Terms (MAT).

All the sample countries chosen for the study, *viz* India, Mexico, Peru and South Africa have complied with the obligations of the Nagoya Protocol by designating the NFP and CAN. The details on the institutional structure of these countries are given in Table-1. India and South Africa have only one CNA each, which in accordance with applicable national legislative, administrative or policy measures is responsible for granting access, issuing written evidence that access requirements have been met and is responsible for advising on applicable procedures and requirements for obtaining prior informed consent and entering into mutually agreed terms. Mexico and Peru have six and four CNA, each designated to various departments which would provide more focused and better management of access and benefit sharing of the resources coming under their purview.

Compared to India, the number of permits or equivalent made available to the ABS Clearing House were less in other sample countries, this could be due to few negotiations made or the permits they were confidential.

Table.1 Countries with more biodiversity in the world

America	Asia	Africa	Oceana
Brazil	China	Madagascar	Australia
Colombia	Indonesia	Democratic Republic of Congo	Papa New Guinea
Ecuador	India	South Africa	
Mexico	Philippines		
Peru	Malaysia		
Venezuela			
United States			

Source: www.activesustainability.com

Table.2 Species diversity of the selected countries

Country	Birds	Amphibians	Reptiles	Fish	Mammals	Vascular plants	BioD Index
Mexico	1,104	396	957	2,624	523	26,071	0.52
South Africa	762	132	447	2,087	297	23,420	0.50
India	1,211	434	689	2,583	412	18,664	0.46
Peru	1,858	572	495	1,573	467	17,144	0.34

Source: Butler, 2019

Table.3 Details of the institutional structure in the selected countries to comply with Nagoya Protocol

Sl.no	Particulars	India	Mexico	Peru	South Africa
1	Date of joining	11th May, 2011	24th February, 2011	4th May, 2011	11th May, 2011
2	Date of ratification	9th October, 2012	16th May, 2012.	8th July, 2014	10th January, 2013.
3	National Focal Point(NFP)	The Ministry of Environment Forests and Climate Change (MoEFCC)	Primary Sector and Renewable Natural Resources of the Ministry of the Environment and Natural Resources (SEMARNAT)	General Directorate for Biological Diversity, Vice Ministry of Strategic Development of Natural Resources, Ministry of the Environment	National Department of Environment, Forestry and Fisheries
4	Competent National Authority(CNA)	National Biodiversity Authority (NBA)	1. Service National of Inspection and Certification of Seeds (SNICS), Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) 2. General Directorate of Wildlife, under secretariat of Management for Environmental Protection, Ministry of Environment and Natural Resources (SEMARNAT). 3. General Livestock Coordination. 4. General Directorate of Forest and Soil Management	1. Ministry of Agriculture and Irrigation - National Forest and Wildlife Service (MINAGRI-SERFOR) 2. Ministry of Production - Vice Ministry of Fisheries and Aquaculture. 3. National Institute of Agrarian Innovation. 4. Directorate of Inventions and New Technologies (DIN) of the National Institute for Defense of Competition and Protection of Intellectual Property (INDECOPI)	BABS Policy Development and Implementation, Department of Environmental Affairs

			(DGGFyS). 5. National Commission for the Development of Indigenous Peoples (CDI). 6. National Commission for Protected Natural Areas (CONANP)		
5	Permits (or equivalent) issued at the time of access as evidence of the decision to grant Prior Informed Consent (PIC) and of the establishment of Mutually Agreed Terms (MAT)			87 non-commercial permits. Comprising of 44 granted by SERFOR and 43 granted by INIA. [Until 2016]	105 permits However copies are not available as they are treated confidential [since 2008]
6	Internationally recognized certificate of compliance [IRCCs]	1006 [As on 1st July 2020]	8 [8th January 2019]	16	32
7	Designated checkpoints			1. The Directorate of Inventions and New Technologies (DIN). 2. The National Commission for the Protection of Access to Peruvian Biological Diversity and Collective Knowledge of Indigenous Peoples (The National Commission against Biopiracy) (CNBio) 3. CONCYTEC,	1. Patent office 2. Ports of Entry & Exit 3. Provincial Permit Issuing Authorities 4. National Department of Environmental Affairs [operational but not yet formalized through the ABS Clearing House]

				4. DIGESA- sanitary registration 5. DIGEMID- pharmaceuticals. 6. National Superintendence of Tax Administration (SUNAT)	

Table.4 Details of legislative, administrative and policy measures on ABS and their salient features in the selected countries to comply Nagoya Protocol

Sl. No.	Country	Legal measure	Salient features
1	India	Biological Diversity Act in 2002 and notified the Rules (Biological Diversity Rules) in 2004	Implemented through 3-tier institutional mechanism: At National: The National Biodiversity Authority (NBA) At State level: State Biodiversity Boards (SBBs) and At local level: The Biodiversity Management Committees (BMCs) Issued several notifications and guidelines on Access to Biological Resources and Associated Knowledge and Benefit Sharing Regulations, 2014, (referred to as ABS Regulations, 2014) Prescribe the scheme of processing the applications, along with template and terms for benefit sharing.
2	Mexico	Issued the promulgatory decree, approved by the Senate of the Republic. Domestic operating legislations The General Law of Ecological Balance and Environmental Protection, The General Law of Sustainable Forest Development, Law of Sustainable Rural Development, and	For customer service, based on current legislation, SAGARPA, through SNICS, defined an Internal Transitional Procedure as an administrative mechanism to deal with access requests. In December 2014, the Government of Mexico, created the Inter-Secretariat Group for the implementation of the Nagoya Protocol and had defined the current access policy

		The General Law of Wildlife.	in Mexico and agreed upon the procedures for dealing with access permits/resolutions. It is made up of 22 Federal Government Agencies.
3	Peru	Regulation of Access to Genetic Resources sets the standard. It established the governing body – MINAM for access to genetic resources. Regime for the Protection of Collective Knowledge of Indigenous Peoples Linked to Biological Resources, in force since 2002, which establishes Directorate of Inventions and New Technologies of the National Institute for Defense of Competition and Protection of Intellectual Property (DIN-INDECOPI)	The Administration and Execution Authorities (AAE) are in charge of attending to access requests, issuing resolutions and verifying compliance with them, according to their sectorial competence like MINAGRI- for continental wild species, INIA - for continental cultivated or domesticated species VMPA-PRODUCE-for hydrobiological species. SERNANP must issue a prior opinion binding on the authorization of access to genetic resources from protected natural areas.
4	South Africa	National Environmental Management: Biodiversity Act, 2004 (NEMBA)- Chapter 6 - which includes regulatory provisions on Bio-prospecting, Access and Benefit Sharing and it came into force on 1 January 2006is the framework legislation	The legislation protects the interests of stakeholders, outlines the requirements of material transfer and benefit sharing agreements, establishes the Bio-prospecting Trust Fund, and provides for the exemption of certain activities or indigenous biological resources from the legislation. It also provides for the management and conservation of its biodiversity, the protection of species and ecosystem that warrant national protection, the sustainable use of an indigenous biological resource, the fair and equitable sharing of benefits, the establishment and functions of a South African National Biodiversity Institute. Regulations on Bio-prospecting, Access and Benefit Sharing (BABS Regulations) under the NEMBA entered into force on 1 April 2008. These Regulations have since been amended and came into force on 19 May 2015.

Legislative, administrative and policy structure

The details presented in Table-2 on the various legislative measures prevalent or amended to their existing legislations to implement the protocol in the sample countries. It is very much clear from the table that except India, other countries have the unitary type of administrative set up to implement the protocol to extend benefits to the stakeholders and provide access to the resources. In India it is of three tier structure having BMCs at the grass root level, guided by the State Biodiversity Board for each state and all works under the guidance and support of National Biodiversity authority located at Chennai.

The parties under study have made used of their existing legislative provisions with minor modifications or amendments to implement the Nagoya Protocol.

In conclusion the key obligations contained in Articles 13 and 14 of Nagoya Protocol formed the base to establish an institutional structure for the implementation of the protocol. The parties under study have made use of their existing legislative provisions with minor modifications or amendments to implement the Nagoya Protocol. They have taken steps to operationalize the Nagoya Protocol but its implementation at the domestic level is yet to be effectively achieved. It is necessary to strengthen the institutional and human resource capacities at national, state and local levels to moderate access and benefit sharing and to accelerate its implementation. Check points could be identified and developed.

Having rich biodiversity, these countries form the source of valuable bio-resources and associated traditional knowledge. Hence, providing access through a transparent channel and sharing the benefits under this Protocol creates incentives to conserve biological diversity, sustainably use its components, and further enhance the contribution of biological diversity for the sustainable development and human well-being (Table 3 and 4).

The increasing evidence of the importance of natural capital means that countries cannot afford for biodiversity to be marginalized when it comes to national priorities. To elevate the status of biodiversity in local and national decision-making, its relevance for different communities must be clarified and ensure that the value and benefits are understood across the full spectrum of audiences. It is important to show how these benefits are aligned to countries developmental needs such as job creation, food security and the provision of basic services.

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