



सत्यमेव जयते



Ministry of Environment, Forest  
and Climate Change



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Deutsche Gesellschaft  
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Zusammenarbeit (GIZ) GmbH

## ABS Partnership Project

### Training Workshop on Monitoring Access and Benefit Sharing in India

National Biodiversity Authority, Chennai, India. 19-24 January, 2020.

## BACKGROUND & THEMATIC PROGRAM

### I. Background:

The Convention on Biological Diversity (CBD) is a collective commitment of the countries of the world to conserve and sustainably use the biological diversity for the benefit of present and future generations. Of the three objectives of the CBD, namely conservation, sustainable use, and fair and equitable sharing of benefits arising from the utilization of biological resources and knowledge associated with them, the third one is the core objective, invariably goes by the acronym ABS (access and benefit sharing) is essential to achieve the first two. The Convention's Nagoya Protocol on Access and Benefit Sharing that entered into force on 12 October 2014, establishes a clear framework for the attainment of this core objective through access to genetic resources and associated traditional knowledge by companies and researchers, and for sharing of benefits arising from their use.

India has been at the forefront in implementing the Convention and the Nagoya Protocol, because as a mega diverse country, India has vital stake in realization of their objectives. India's Biological Diversity Act 2002 and Biological Diversity Rules, 2004 includes provisions and procedures for access to resources subject to fair and equitable benefit sharing. The Guidelines on Access and Benefit Sharing Regulations, 2014 notified following the Nagoya Protocol provided a further fillip to the ongoing implementation of access and benefit sharing measures by India.

### Aim:

This five day workshop will provide practical training in methods and tools for monitoring access to genetic resources and benefit-sharing in India under the Nagoya Protocol.

India is a Party to the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits Arising from the Utilization of Genetic Resources. The Nagoya Protocol was adopted in the framework of the United National Convention on Biological Diversity in 2010 and entered into force in 2014. There are presently 118 Parties to the Protocol.

The basic idea behind the protocol is that countries must consent to the use of genetic resources collected from their jurisdiction. Countries and communities may also share in the benefits arising from research and development involving genetic resource and associated traditional knowledge. This is to be achieved through a combination of the use of access and benefit-sharing agreements or ABS contracts and the ability to identify and address cases of non-compliance with national access and benefit-sharing legislation. Article 17 of the Nagoya Protocol addresses monitoring using cost effective tools.

The monitoring of access and benefit sharing involves three main questions:

a) In practical terms how to monitor ABS?

- b) How to create human and technical capacity to monitor ABS?
- c) How to ensure sustainability in human and technical capacity to monitor ABS over time?

The first of these challenges is being addressed in India through the creation of an online ABS monitoring system linked to the ABS permit system. This workshop will focus on the human resources and capacity required to monitor ABS with a view to the longer term sustainability of monitoring capacity in India.

In addressing human capacity to engage in monitoring it is important to recognize that ABS monitoring involves the use of knowledge and methods from a range of different disciplines:

- a) Biodiversity informatics: this involves understanding taxonomic data and taxonomic data sources. In addition, genetic sequence data is becoming increasingly important both in taxonomy and in wider research and development.
- b) Geographic data (coordinates and GIS data). This addresses questions about where samples are being collected, where samples are being stored, and identifying the commercialization of biodiversity based inventions or products in different markets around the world.
- c) Scientometrics/bibliometrics (analysis of scientific literature) provides answers to questions about who is conducting research involving bio-resources and the ability of countries to monitor compliance with ABS and to create a knowledge base on biodiversity. This type of analysis is increasingly supported by the use of standardized researcher identifier such as ORCID that automate retrieval of new publications.
- d) Patent analytics. This involves the ability to retrieve, analyse and interpret patent data to answer questions about commercial research and development.
- e) The use of web services (Application Programming Interfaces) to retrieve data from different sources.
- f) Visualization and Network Analysis. Exploring the data and communicating the results to policy and scientific audiences.
- g) Software tools and basic programming skills.

These skills rarely exist in one person. Where the skills exist in one person or an organisation is at serious risk of failure if that person or persons leaves to pursue other opportunities. The question therefore becomes how to ensure that the range of disciplinary skills required are represented and that a sufficiently large group of people is created to ensure long-term sustainability. This workshop aims to contribute to creating as small inter-disciplinary network to address the problem of long-term human capacity for ABS monitoring in India.

### **The workshop will be divided into two major events:**

Two dedicated days of capacity building of the invited international participation. To start with day one will deal with introduction of Biological Diversity Act., 2002 and its status of implementation in India. This will also help in finding the common issues and challenges faced and overcome.

The Day one and Two will be for both International and National workshop participants who will be informed about the points mentioned below (a and b).

The Day three- five will be solely dedicated to the National Participants where a hands on training will be provided in order to learn and further provide support to the regulatory bodies either at State level (SBBs) and at national Level (NBA); as mentioned below (c).

- a) Provide background on monitoring access to genetic resources and benefit sharing under the Nagoya Protocol
- b) Present existing projects for monitoring access to genetic resources and benefit-sharing in India, Kenya, and other countries

c) Provide hands on practical training in tools and methods for ABS monitoring.

A draft schedule for the workshop is presented below.

Participants:

The focus of the exercise is on building a small inter-disciplinary network of people interested in ABS monitoring to provide support to longer term ABS monitoring by the NBA:

1. NBA staff involved in the administration of ABS applications and in particular for ABS monitoring
2. Members of taxonomic collections involved with biodiversity informatics
3. The Intellectual Property Office in India (Chennai)
4. Centre for Development of Advanced Computing/NIC (informatics)
5. one or more genomics (genetic or digital sequence information) specialists from India
6. Traditional knowledge holder organisations (civil society)
7. Selected African Countries in the process of developing ABS monitoring System (Sponsored by ABS Initiative) project team participants
8. Selected Asian countries in the process of developing ABS monitoring System (Sponsored by UNDP Global Project)

Logistics:

The workshop will consist of a combination of presentations and hands on computer based training. The venue for the workshop will ideally include a computer laboratory with a good internet connection and technical support for installing required software and addressing technical problems that may arise.

## V. Program

The tentative program of Regional Training Workshop is as follows:

### PROVISIONAL AGENDA

Time	Programme	Resource Person/ Persons Involved
<b>Day 0: Sunday, 19 January 2020</b>		
Arrival of participants in Chennai, India. Registration, Inauguration & Welcome dinner		
<b>Day 1: Monday, 20 January 2020</b>		
Inaugural Session:		
09:30-09:40	• Opening & Welcome - NBA, India	Shri. Justin Mohan Secretary, NBA
09:40-09:50	• Welcome Remarks - MOEFCC, India	
09:50-10:00	• Special Remarks - UNDP	Dr. Alejandro Lago Candeira UNDP GEF Global ABS Project Manager
10:00-10:10	• Special Remarks - GIZ, India	ABS Partnership Project
10:10-10:30	Tea Break & Photo Opportunity	
10:30-11:00	• Agenda setting & An overview of GIZ-NBA Cooperation	Chairperson, NBA / Secretary, NBA

Time	Programme	Resource Person/ Persons Involved
11:00-11:30	<ul style="list-style-type: none"> <li>Implementation of Nagoya Protocol on Access and Benefit Sharing in India: Process and Status</li> </ul>	Dr. Raghuram, NBA
11.30 – 12.00	<ul style="list-style-type: none"> <li>Indian Experiences in Monitoring ABS</li> </ul>	Dr. Narendran Thiruthy
12:00-13:30	<ul style="list-style-type: none"> <li>Approaches to monitoring ABS</li> <li>India (GIZ and UNDP project)</li> <li>Kenya: Progress on the IT ABS system</li> <li>ABS Initiative</li> </ul>	Dr, Ruchi Pant, UNDP and Dr. Aeshita Mukherjee-Wilske, GIZ Kamau Cyrus, NACOSTI Dr Hartmut Meyer, ABS Initiative
13:30-14:15	Lunch Break	
14:15-15:45	<ul style="list-style-type: none"> <li><b>Biodiversity Informatics</b></li> </ul> <p>Understanding and Accessing Taxonomic Data Speaker: Taxonomic collection participants</p> <p>What is digital or genetic sequence data Speaker: TBD (taxonomic collection participant, genomics specialist combined with Paul?)</p> <p>Geographic Location Data</p>	Dr Paul Oldham
16:00-16:15	Tea Break	
16:15-17:15	<b>Activity 1-Practical learning:-</b> <ul style="list-style-type: none"> <li>ABS e-filing in India - forms, functions and administrative procedures.</li> <li>Evaluation of ABS applications &amp; Procedures for determination of benefit sharing</li> </ul>	NBA
17:15-17:30	Reporting activity of day-1 and wrap-up	NBA
<b>Day 2: Tuesday, 21 January, 2020</b>		
09:30-09:45	Opening session	NBA
09:45-10:45 09:45 – 10:05 10:05 – 10:25 10:25 – 10:45	<ul style="list-style-type: none"> <li>Key note address by Dr. R.S.Rana (Chair)</li> <li>Biological resources and Intellectual Property Registration in India</li> <li>Experiences in State level implementation of ABS in India – Agreements, types of users, clauses, confidentiality, compliance and enforcement.</li> </ul>	Dr. Sharana Gouda, Assistant Controller, CGPDTM. Chennai.  SBB Representatives of:- Uttarakhand, Maharashtra and Tamil Nadu.
10:45 – 11:30	<b>Accessing Scientific Literature</b> Searching scientific literature  The problem with names and researcher identifiers	Dr. Paul Oldham
11:30-11:45	Tea Break	
11:45-13:00	<b>Human Resources for ABS monitoring</b> Sustainability of ABS monitoring: ways forward Speaker:	Dr Paul Oldham
13:00-13.45	Lunch Break	
13:45-15:00	Introduction to Patent Data (presentation)	Patent Office of India

Time	Programme	Resource Person/ Persons Involved
	Patent Databases (practical)	
15:00-15:15	Tea Break	
15:15-16:15	Cleaning Patent Data (practical)	Dr Paul Oldham
16:15-17:00	Demonstration to IT enabled ABS Monitoring System	ABS Partnership Project
17:00 – 17:20	Introduction to the Global ABS Community	Dr. Alejandro Lago, UNDP
17:20-17:30	Reporting activity of day-2 and wrap-up	
<b>Day 3: Wednesday, 22 January, 2020</b>		
09:30-10:30	<b>Practical learning:</b> A gentle introduction to programming using R Studio Practical Exercises I	Dr Paul Oldham
10:30-11:30	The rise of Artificial Intelligence and Machine Learning	CDAC
11:30-11:45	Tea Break	
11:45- 13:30	Web services/APIs for accessing data Practical Exercises II	Dr Paul Oldham
13:30-14:30	Lunch Break	
14:30- 15:45	Creating Dashboards with Tableau Practical Exercises III	CDAC
15:45- 16:15	Tea Break	
16:15- 17:15	Visualising Networks with Graphics Practical Exercises IV	CDAC
17:15-17:30	Reporting activity of day-3 and wrap-up	
<b>Day 4: Thursday, 23 January, 2020</b>		
09:30-10:00	Opening session	PMU, NBA.
10:00-11:15	<b>Review of the Work done so far</b>	Dr. Paul Oldham
11:15-11:30	Tea Break	
11:30- 13:00	Close of the workshop <b>Concluding session:</b> <ul style="list-style-type: none"> <li><b>Synthesis of the workshop</b></li> <li><b>Evaluation and lessons learned</b></li> <li><b>Valedictory Address</b></li> </ul> <b>Vote of thanks &amp; closure</b>	-PMU, NBA, Chennai  -GIZ  -NBA  Secretary, NBA
13:00-14:00	Lunch	
<b>Day 5: Friday, 24 January, 2020</b>		
Departure of participants		

# Cultural programme followed by Official dinner organized on-----, 2018

# Timings of subsequent sessions shall be pushed back as per requirement