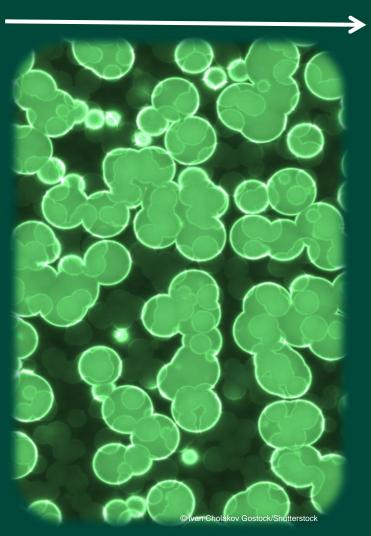
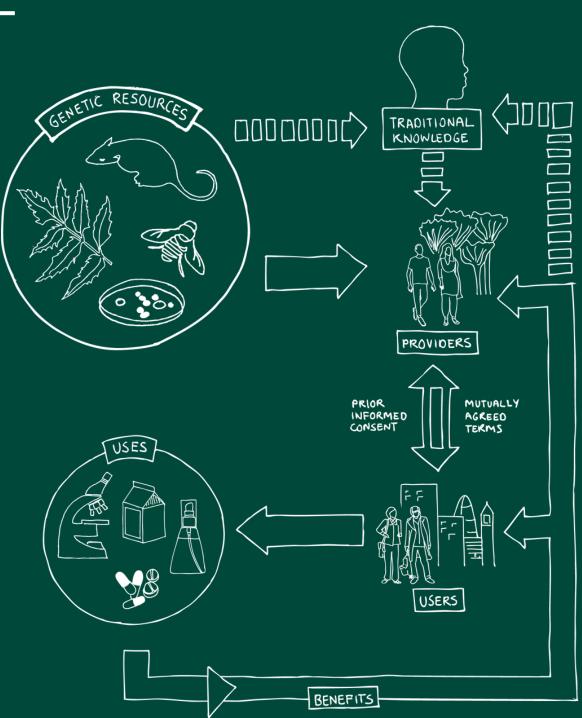
Access and benefit- sharing information kit







**An information kit** was developed to build awareness on ABS. The key themes addressed in the information kit are:

- Access and benefit-sharing
- Uses of genetic resources
- Traditional knowledge
- The Bonn Guidelines
- National Implementation
- The Nagoya Protocol on ABS

A brochure, factsheets and PowerPoint slides can be downloaded at:

www.cbd.int/abs



### What are genetic resources?

- All living organisms (plants, animals and microbes) carry genetic material potentially useful to humans
- These resources can be taken from the wild, domesticated or cultivated
- They are sourced from:
  - Natural environments (in situ)
  - Human-made collections (ex situ) (e.g. botanical gardens, genebanks, seed banks and microbial culture collections)



### Why are genetic resources important?

- They provide crucial information to better understand nature
- They can be used to develop a wide range of products and services for human benefit
- The way in which genetic resources are accessed and how the benefits arising from their use is shared can create incentives for:
  - The conservation and sustainable use of biodiversity
  - The creation of a fairer and more equitable economy to support sustainable development



### The link to traditional knowledge:

- Our understanding of genetic resources often comes from traditional knowledge of indigenous and local communities which has been handed down over generations
- The value of this knowledge must be understood and recognised by those who use it
- Essential that the rights of indigenous and local communities are considered during access and benefit-sharing (ABS) negotiations



### What is ABS?

It refers to the way in which genetic resources may be accessed, and how the benefits that result from their use are shared between the people or countries using the resources (users) and the people or countries that provide them (providers)







#### How does ABS work?

It is based on:

- Prior informed consent (PIC) being granted by a provider to a user
- Negotiations between the provider and the user to develop mutually agreed terms (MAT) that ensure that the benefits from the use of genetic resources are shared equitably



### What is prior informed consent?

The permission given by the competent national authority of a provider country to a user prior to accessing genetic resources, in line with an appropriate national legal and institutional framework

### What are mutually agreed terms?

An agreement reached between the providers of genetic resources and users on the conditions of access and use and the benefits to be shared between both parties



#### Who is involved in ABS?

Providers of genetic resources:

- States have sovereign rights over their natural resources
- Laws within the provider country determine rights over genetic resources at the national level, who has the authority to grant access to genetic resources and who should be involved in the negotiation of mutually agreed terms with potential users (e.g. private land owners, indigenous and local communities)



#### Who is involved in ABS?

Users of genetic resources:

- A diverse group, including botanical gardens, industry researchers such as pharmaceutical, agriculture and cosmetic industries, collectors and research institutes
- They seek access for a wide range of purposes, from basic research to the development of new products





#### Who is involved in ABS?

National Focal Points (NFPs):

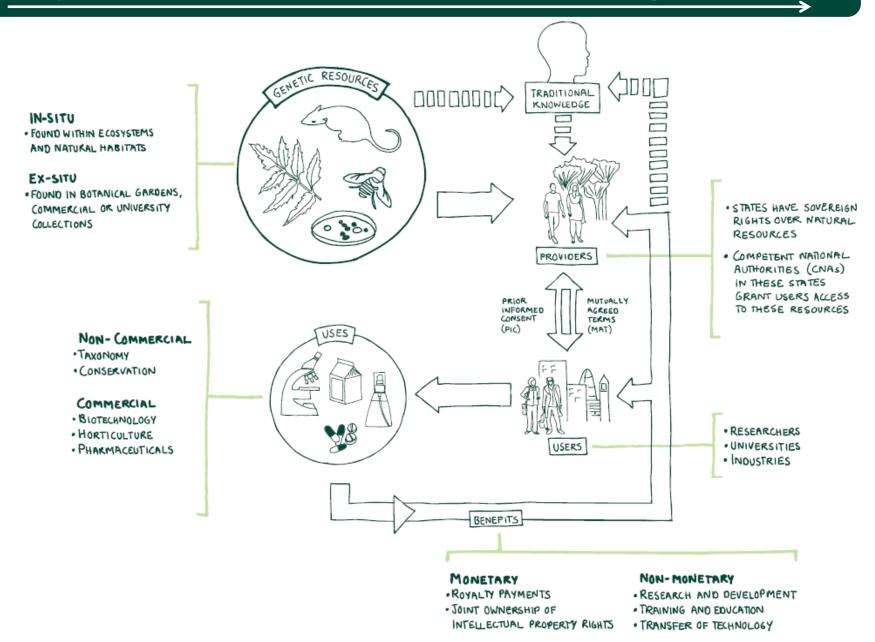
 Responsible for providing information on ABS, such as the requirements for gaining access to genetic resources

Competent National Authorities (CNAs):

- Established by governments and responsible for granting access to their genetic resources
- Represent providers on a local or national level



### Key themes on access and benefit-sharing



### **ABS Timeline**

- 1992 The text of the Convention on Biological Diversity (CBD) is opened for signature at the Rio Earth Summit
- 1993 The CBD is ratified and comes into force
- 1998 A panel of experts is established to clarify principles and concepts related to ABS
- 2000 The Conference of the Parties establishes the Ad Hoc Open-ended Working Group on Access and Benefitsharing



### **ABS Timeline**

2002 The Conference of the Parties adopts the Bonn Guidelines on ABS

At the World Summit on Sustainable Development, States called for action to negotiate an international regime to promote the fair and equitable sharing of benefits arising from the use of genetic resources

2004 The Working Group on ABS is given the mandate to negotiate an International Regime on ABS



### **ABS Timeline**

- The Conference of the Parties establishes a clear process for the finalization of the international regime on ABS and its adoption at its tenth meeting in October 2010
- The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization was adopted by the Conference of the Parties, at its tenth meeting, in Nagoya, Japan



A Protocol on ABS was negotiated to further implement the ABS provisions of the CBD,

### Why is it important to have a Protocol on ABS?

- It will ensure that biodiversity-rich countries obtain a fair share of benefits arising out of the use of their genetic resources by setting out a clear and transparent framework for ABS
- Benefit-sharing, through technology transfer, research results, training and profits, can contribute to poverty reduction and sustainable development

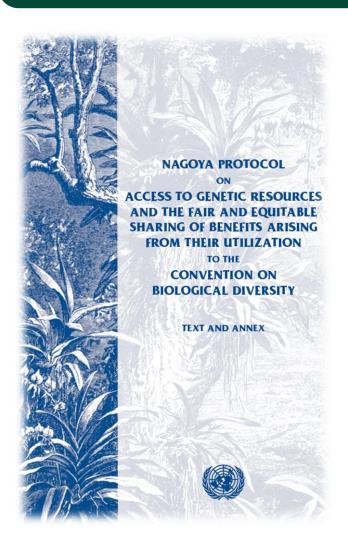


### Why is it important to have a Protocol on ABS?

- ABS can contribute to further research and development contributing to human well-being through the use of genetic resources in pharmaceuticals, cosmetics, agriculture and many other sectors
- ABS is essential to better understand nature through taxonomic research

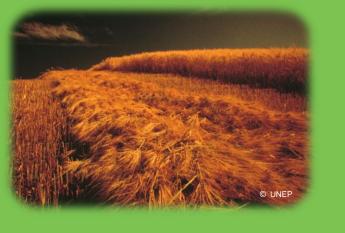


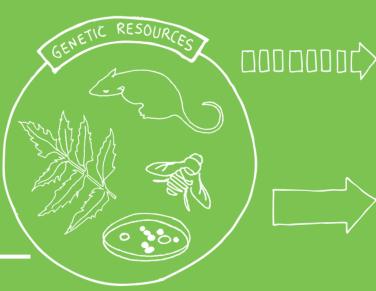




- The Nagoya Protocol on ABS was adopted at the tenth Conference of the Parties to the CBD in October 2010 in Nagoya, Japan
- Further information on the Nagoya Protocol can be found at: <u>www.cbd.int/abs</u>













BENEFITS

### What is ABS about?

- How genetic resources may be accessed
- How users and providers reach agreement on the sharing of benefits that may result from their use











ABS rules (Article 15 of the CBD) state that governments should:

- Create systems that facilitate access to genetic resources for environmentally sound purposes
- Ensure that benefits resulting from their use are shared fairly and equitably between users and providers



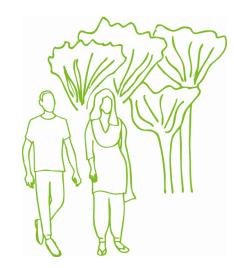
### Users seek access to genetic resources for:

- Scientific research (e.g. taxonomy)
- Development of commercial products (e.g. pharmaceuticals)

### **Providers** of genetic resources grant access:

 In exchange for a share of the benefits that result from their use









### Users seeking access to genetic resources must:

 Get permission from the provider country (known as prior informed consent or PIC)

### **Both provider and user must:**

 Negotiate an agreement to share resulting benefits (known as mutually agreed terms or MAT)



Benefits arising from the use of genetic resources may be:

- Monetary when research and developments leads to a commercial product (e.g. royalties, milestone payments, licensing fees)
- Non-monetary (e.g. technology transfer, enhancement of research skills)

ABS can contribute to poverty alleviation and sustainable development











# Case-study: The International Cooperative Biodiversity Groups (ICBG) Bioprospecting Programme in Panama

- ICBG Panama programme started in 1998
- Ensures that benefits arising from the use of Panama's genetic resources are shared with Panama



### **Case-study:** The International Cooperative Biodiversity Groups (ICBG) Bioprospecting Programme in Panama

So far, benefits have included:

- New and improved scientific infrastructure
- New research programmes
- Training of scientists
- Development of drug-discovery programs for diseases





# Case-study: The International Cooperative Biodiversity Groups (ICBG) Bioprospecting Programme in Panama

- The programmes ensures that local scientists play a key role in the research
- An important focus is awareness raising on the importance of biodiversity conservation at all levels of the Panamanian society



### Case-study: The International Cooperative Biodiversity Groups (ICBG) Bioprospecting Programme in Panama

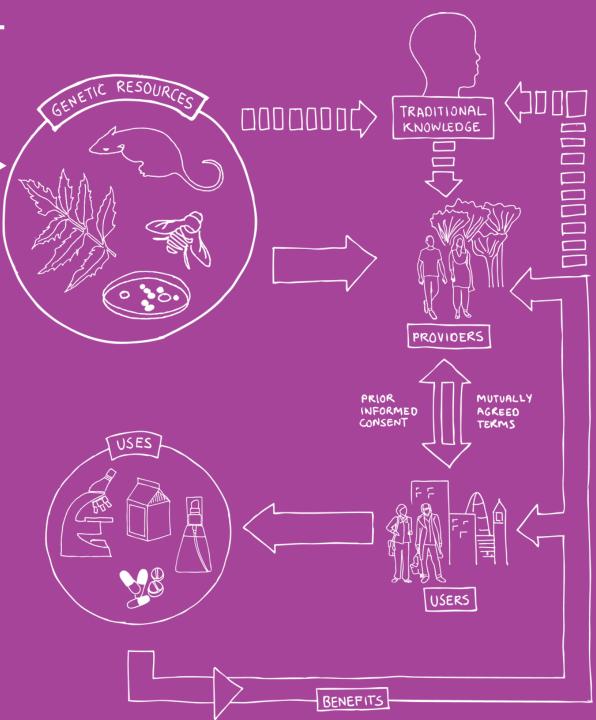
- The programme has increased the incentive for conservation
- It played an important role in the creation of the Coiba National Park and establishing it as a UNESCO World Heritage Site











### What does using genetic resources mean?

 It refers to the process of researching the beneficial properties of genetic resources

### Why are genetic resources useful?

- They can lead to the development of new products for human well-being (e.g. pharmaceuticals, cosmetics)
- They allow for a better understanding of the natural world
- They can lead to improvements in biodiversity conservation





### Genetic resources can be put to commercial use:

- Companies develop specialty enzymes, enhanced genes, or small molecules
- They can be used in crop protection, drug development, production of specialized chemicals, or in industrial processing





### Genetic resources can be put to **non-commercial use**:

 Academic and public research institutes use genetic resources to increase our understanding of the natural world through activities such as taxonomy, and ecosystem analysis





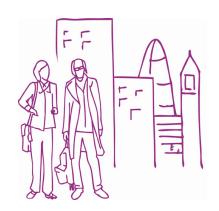
### **Commercial sector uses:**

### Pharmaceutical industry

 Chemical compounds or substances produced by living organisms often provide good leads for the development of new drugs

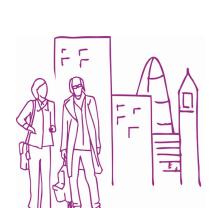
### Industrial biotechnology

 Enzymes are often used in textile, detergent, food, feed and other industries to improve efficiency and quality of products









### **Commercial sector uses:**

### Agricultural biotechnology

 Large seed companies often rely on genetic resources to improve performance and farming efficiency for major crops

### Ornamental horticulture industries

 Nurseries, botanical gardens and private collections use genetic resources to produce ornamental plants



#### Non-commercial sector uses:

### Taxonomy and conservation

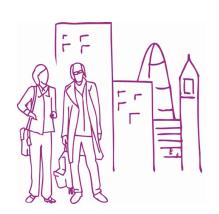
- Genetic resources are crucial for naming and describing species
- Scientific research helps improve environmental conservation





**Distinction** between commercial and non-commercial uses is not always clear-cut

- ABS can be a long chain of providers and users, such as:
  - Indigenous and local communities
  - Research institute in provider country
  - University in user country
  - Private company
- Some genetic resources initially accessed for research purposes can end up being used for commercial purposes



ABS in practice

Different type of genetic resources

Animal, plant, microbial

Used for different purposes

Research and/or commercialization

Different types of users operating in different sectors

- pharmaceuticals
- seed and crop protection
- personal care and cosmetics
- botanicals and horticulture

A large number of actors involved, rarely one provider and one user (e.g. intermediaries)

#### **Provider of GR**

(& associated TK): e.g. National Competent Authority

#### **Prior Informed Consent (PIC)**

Intermediaries in either provider or user country: e.g. research institutes, universities, botanical gardens, ex situ collections

#### **User of GR**

(& associated TK):
e.g. industry,
research institutes,
universities



- Non-commercial or commercial utilization of GR (& associated TK): e.g. basic research, research and development, development of new pharmaceuticals, biotechnological products
- Benefit-Sharing (monetary & non-monetary): e.g. royalties, technology transfer, training

#### Who needs to understand the uses of genetic resources?

**Providers** - important that they understand the value of genetic resources to:

- Creates incentives for conservation and sustainable use
- Ensure that benefits are shared equitably





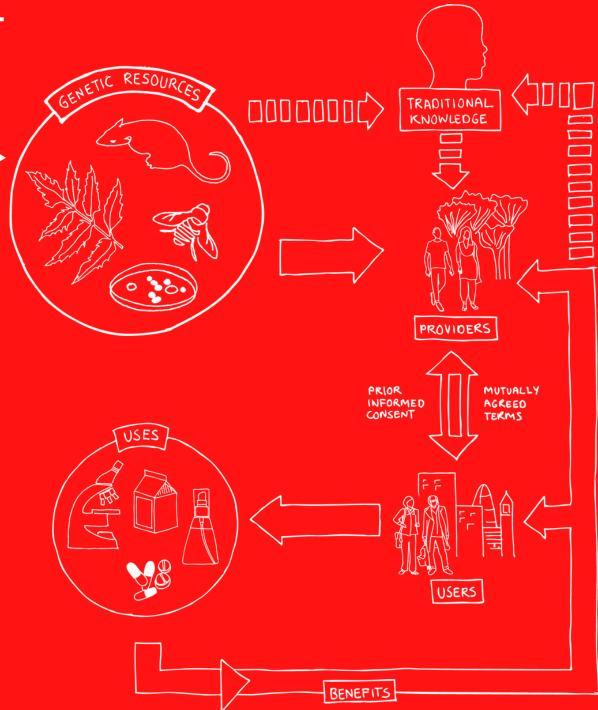
#### Who needs to understand the uses of genetic resources?

#### **Users**:

- Some research institutions and industries depend on improving their understanding of genetic resources to further their work
- End users include anyone who buys or benefits from the commercialized products, or benefits indirectly from the value that genetic resources can have in improving production, such as increasing agricultural yields and food supplies









#### What is traditional knowledge

- For centuries, indigenous and local communities (ILCs) have learned, used and passed on knowledge about local biodiversity and how it can be used for a range of purposes
- In ABS, traditional knowledge refers to the knowledge, innovations and practices of indigenous and local communities related to genetic resources





#### Why is traditional knowledge important?

- Indigenous and local communities rely on genetic resources and have helped preserve, maintain and increase biodiversity over centuries
- Traditional knowledge related to biological resources can be an important source of information for identifying new uses of genetic resources
- The leads provided by traditional knowledge in identifying the properties of genetic resources have enabled industries to develop new products and have helped scientists understand biodiversity





#### In ABS agreements:

- The prior informed consent (PIC) of indigenous and local communities should be sought whenever traditional knowledge associated with genetic resources is to be used
- Users of genetic resources and indigenous and local communities should negotiate mutually agreed terms (MAT) to encourage the equitable sharing of benefits arising out of the use of traditional knowledge





#### **Article 8(j) of the CBD:**

 States the need for governments to respect, preserve, maintain and promote the wider application of traditional knowledge with the approval and involvement of relevant indigenous and local communities

**CBD webpages** with information on traditional knowledge, innovations, practices and measures:

- www.cbd.int/traditional
- www.cbd.int/tk





# CBD Working Group on Traditional Knowledge:

- Directs and facilitates discussions between governments, indigenous and local communities and other interested parties
- Allows indigenous and local communities to contribute their views and recommendations on related issues





# Case study: Traditional knowledge of the Hoodia plant

- Hoodia is a succulent plant indigenous to southern Africa
- It has been used for centuries by indigenous San peoples to stave off hunger and thirst



#### Case study: Traditional knowledge of the Hoodia plant

- In 1996, the South African-based Council for Scientific and Industrial Research (CSIR) patented active compounds of Hoodia for potential commercialization of an appetite suppressant
- This led to a licensing agreement between CSIR and some large pharmaceutical companies to develop and commercialize a Hoodia-based product



#### Case study: Traditional knowledge of the Hoodia plant

- Initial actions were taken without the consent of the San peoples which led to an outcry by NGOs and media attention
- As a result, a benefit-sharing agreement was signed with the San peoples





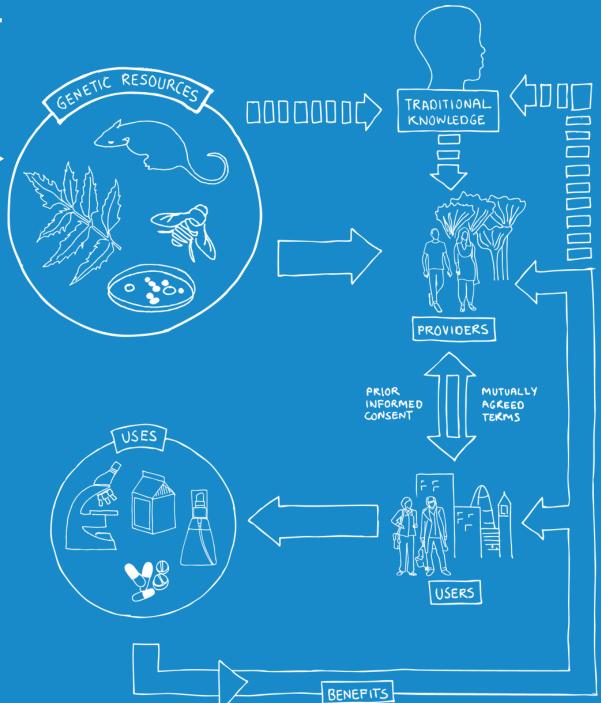
#### Case study: Traditional knowledge of the Hoodia plant

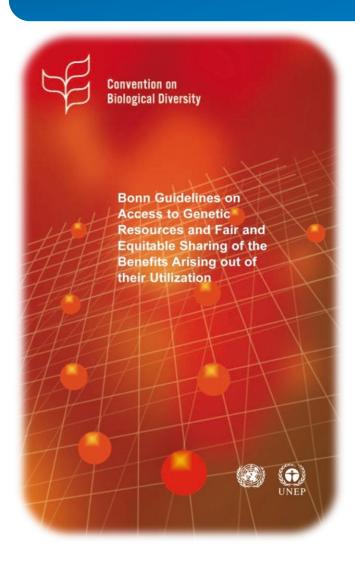
The agreement included:

- Monetary benefits:
  - Milestone payments during product development
  - Royalty payment in the case of commercialization
- Non-monetary benefits:
  - Funds for development, education and training of the San community
  - Funds to support projects and institutions working to improve research and protection of the San traditional knowledge and heritage









#### The Bonn Guidelines:

- Assist governments in the elaboration of measures to govern ABS
- Help users and providers of genetic resources to implement ABS procedures effectively

The Bonn Guidelines can be **downloaded** at:

www.cbd.int/abs/bonn.shtml



#### **Main purpose of the Guidelines:**

- To guide countries, as providers, in setting up their own national measures for ABS, such as the elements of a prior informed consent procedure
- To assist providers and users in the negotiation of mutually agreed terms by providing examples of what elements should be included in these agreements







# The Bonn Guidelines are relevant for:

- Governments developing their national ABS measures
- Institutions and individuals involved in the negotiation of ABS agreements



The Guidelines provide that an **effective prior informed consent system should** respect basic principles, such as:

- Legal certainty and clarity
- Facilitated access to genetic resources at a minimum cost
- Restrictions on access to genetic resources should be transparent, based on legal grounds, and not run counter to the objectives of the Convention





The Guidelines provide that an effective prior informed consent system is to include:

- The establishment of competent national authorities (CNAs) who can grant prior informed consent
- Procedures for obtaining prior informed consent from the competent national authorities
- Clearly specified timing and deadlines
- Specifications of use
- Mechanism for consultation of relevant stakeholders







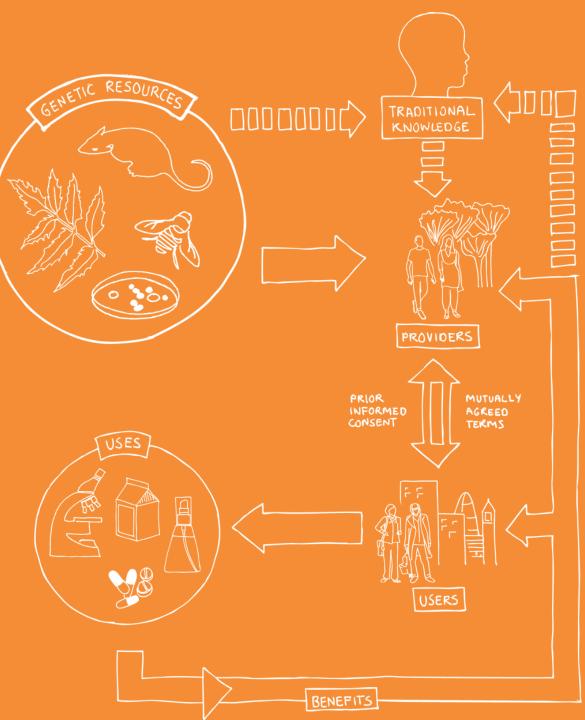
The Guidelines outline principles and basic requirements to be considered in the development of mutually agreed terms, including:

- Legal certainty and clarity
- Facilitating the transaction through clear information and formal procedures
- Reasonable periods of time for negotiations
- Terms set out in a written agreement













- Governments are to adopt national measures in order to facilitate access to genetic resources and to ensure benefit-sharing, in accordance with the CBD
- Measures for implementing ABS may include:
  - Regional strategies, policies, legislation, regulations and codes of conduct
  - The choice of measures will depend on national circumstances





#### **National implementation ensures:**

- Legal certainty and a fair relationship between users and providers
- Confidence to providers that users will respect proper procedures for access and share benefits fairly
- Facilitated access for users (i.e. info on who to contact and what are the procedures for access)







Governments should consider measures for users and providers of genetic resources to ensure:

- A transparent framework exists which facilitates ABS
- That users under their jurisdiction negotiate mutually agreed terms with the provider country prior to accessing genetic resources

Essential to **ensure benefit-sharing** from the use of genetic resources



- To date, countries have largely focused on developing measures as providers of genetic resources to regulate access to their resources and to ensure they receive benefits that may arise from the use of these resources
- A number of countries have also adopted measures to ensure that users under their jurisdiction comply with the ABS requirements of provider countries
  - e.g. amendment of patent laws so that the origin of genetic resources is disclosed, thereby encouraging benefit-sharing



- Some groups of users such as botanists and researchers have developed voluntary instruments, guidelines and codes of conduct
- These are useful to raise awareness on ABS and encourage compliance with the ABS provisions of the CBD



 Examples of such instruments can be found on the CBD Secretariat's webpage at: www.cbd.int/abs/instruments/



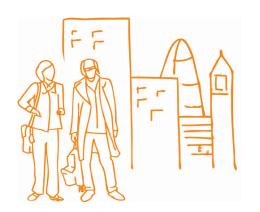


**Relevant information** and procedures to include in ABS measures:

- Who is the competent national authority that grants access to which genetic resources
- How to obtain prior informed consent
- What to include in the mutually agreed terms between users and providers







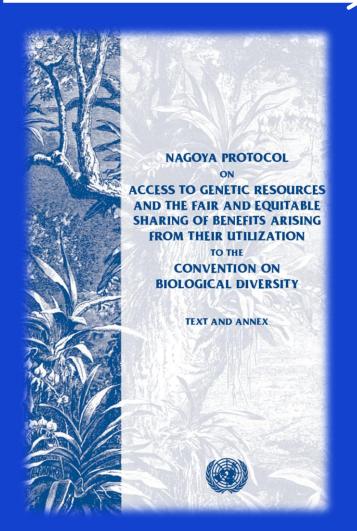
# To achieve national implementation, governments should have:

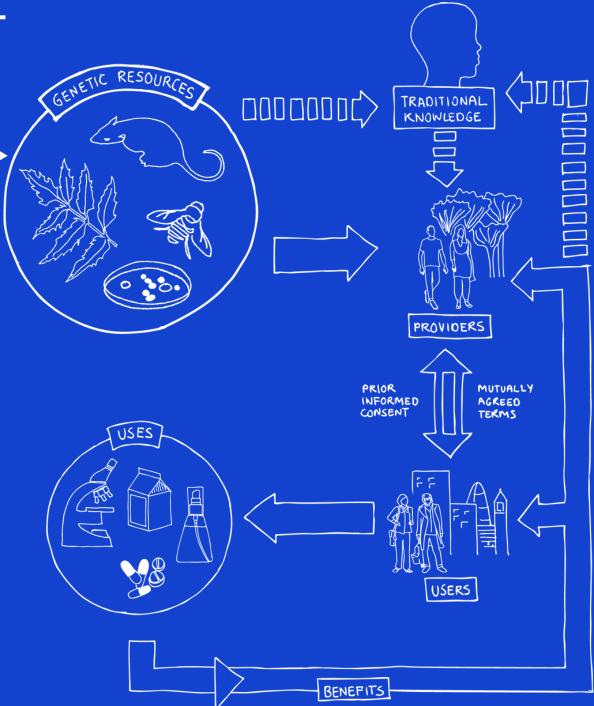
- National Focal Point(s): Provides information on who to contact, and the correct procedures to follow, for access to genetic resources
- Competent National Authority(ies):
   Responsible for granting access to genetic resources, and represents providers on a local or national level



- To help providers and users understand various ABS measures around the world, the CBD Secretariat holds a database on ABS measures
- The database includes:
  - Measures taken by Parties in order to implement the ABS provisions of the Convention
  - Measures undertaken at the regional, national, subnational or community level
  - An overview of the main ABS elements of each regional or national regime
- The database is available at: <a href="www.cbd.int/abs/measures/">www.cbd.int/abs/measures/</a>









www.cbd.int/abs

#### **Background**

- World Summit on Sustainable Development, 2002: Political mandate for international regime on ABS
- 7th Conference of the Parties, 2004: Ad Hoc Open-ended Working Group on ABS mandated to negotiate an international regime on ABS
- 10th Conference of the Parties,
   2010: Adoption of the Nagoya
   Protocol on ABS



#### What is the Nagoya Protocol?

- A new international treaty on ABS to support the implementation of the third objective of the Convention on Biological Diversity: the fair and equitable sharing of benefits arising from the utilization of genetic resources
- A landmark agreement in the international governance of biodiversity relevant for commercial and noncommercial sectors dealing with genetic resources





#### What is the Nagoya Protocol?

 Based on the fundamental principles of prior informed consent (PIC) and mutually agreed terms (MAT) enshrined in the Convention on Biological Diversity







# Why is the Nagoya Protocol important?

- It will create greater legal certainty for users and providers of genetic resources
- It will help to ensure benefitsharing, in particular when genetic resources leave the country providing the resource
- It establishes more predictable conditions for access





#### **Advantages of the Nagoya Protocol**

- It encourages the advancement of research on genetic resources which could lead to new discoveries
- It creates incentives to conserve and sustainably use genetic resources
- Enhances the contribution of biodiversity to development and human well-being



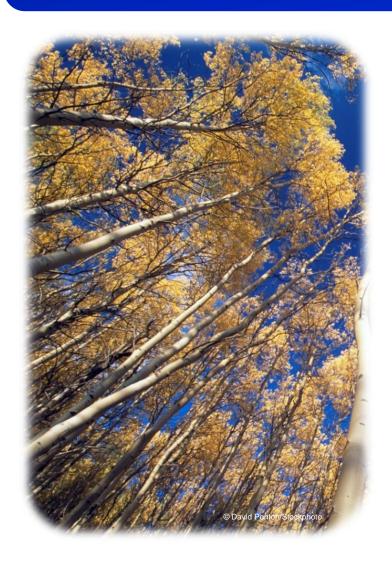




# What does the Nagoya Protocol cover?

 Genetic resources and traditional knowledge associated with genetic resources, as well as benefits arising out of their utilization





# What are the core elements of the Nagoya Protocol?

- Access
- Benefit-sharing
- Compliance
- Traditional knowledge



#### **Access obligations**

#### Domestic-level access measures should:

- Create legal certainty, clarity and transparency
- Provide fair and non-arbitrary rules and procedures
- Establish clear rules and procedures for prior informed consent and mutually agreed terms
- Provide for issuance of a permit or its equivalent when access is granted



#### Access obligations (cont'd)

#### Domestic-level access measures should:

- Create conditions to promote and encourage research contributing to biodiversity conservation and sustainable use
- Pay due regard to cases of present or imminent emergencies that threaten human, animal or plant health
- Consider the importance of genetic resources for food and agriculture and their special role for food security



#### **Benefit-sharing obligations**

#### Domestic-level benefit-sharing measures should:

 Provide for the fair and equitable sharing of benefits arising from the utilization of genetic resources, as well as subsequent applications and commercialization, with the contracting party providing the genetic resources



#### **Benefit-sharing obligations (cont'd)**

#### Domestic-level benefit-sharing measures should:

 Ensure that sharing of benefits is subject to mutually agreed terms. Benefits may be monetary (such as royalties) or non-monetary (such as sharing research results or technology transfer)





#### Global multilateral benefit-sharing mechanism

- To address benefit-sharing with respect to genetic resources occurring in:
  - Transboundary areas
  - Situations where prior informed consent cannot be obtained
- The need for and modalities of this mechanism are to be considered
- Benefits shared through this mechanism are to be used to support the conservation and sustainable use of biodiversity globally



#### **Compliance obligations**

#### **Innovation of the Nagoya Protocol:**

 Obligation to comply with national ABS legislation and mutually agreed terms



#### **Compliance with ABS legislation**

#### Parties to the Protocol should:

- Take measures to provide that genetic resources
   utilized within their jurisdiction have been accessed
   in accordance with prior informed consent, and that
   mutually agreed terms have been established
- Take measures to address situations of noncompliance
- Cooperate in cases of alleged violation of another Party's requirements



#### Compliance with mutually agreed terms

#### Parties to the Protocol should:

- Encourage contractual provisions on dispute resolution in mutually agreed terms
- Ensure an opportunity is available to seek recourse under their legal systems
- Take measures regarding access to justice and the mutual recognition and enforcement of foreign judgments and arbitral awards



#### Monitoring the utilization of genetic resources

#### Parties to the Protocol should:

- Designate one or more effective checkpoint(s) for collection of information at any stage of research, development, innovation, pre-commercialization or commercialization
- Encourage reporting requirements in mutually agreed terms
- Encourage cost-effective communication tools

The Protocol establishes an internationally recognized certificate of compliance as evidence that prior informed consent was obtained and mutually agreed terms established







The Protocol encourages the development, update and use of:

- Model contractual clauses for mutually agreed terms
- Codes of conduct, guidelines and best practices and/or standards

For an overview of such instruments: <a href="https://www.cbd.int/abs/instruments">www.cbd.int/abs/instruments</a>



# How does the Nagoya Protocol address traditional knowledge associated with genetic resources?

- With provisions on access, benefit-sharing and compliance
- It aims to ensure that indigenous and local communities obtain a fair share of the benefits from the use of their:
  - Traditional knowledge associated with genetic resources
  - Genetic resources, in cases where they have established rights to grant access to them, in accordance with national legislation



By setting out clear provisions on access to traditional knowledge associated with genetic resources, the Protocol will:

- Strengthen the ability of indigenous and local communities to benefit from the use of their knowledge, innovations and practices
- Provide incentives for the promotion and protection of traditional knowledge
- Encourage the development of:
  - Community protocols, minimum requirements for mutually agreed terms and model contractual clauses





# Supporting mechanisms to assist with implementation

- National focal points and competent national authorities: provide information, grant access and facilitate cooperation
- Access and Benefit-sharing
   Clearing-House: a web-based
   information exchange mechanism



# Supporting mechanisms to assist with implementation (cont'd)

- Capacity-building based on a country's self assessment of national needs and priorities
- Awareness-raising with and among key stakeholders
- Technology transfer, including biotechnological research
- Targeted financial support for capacity-building and development initiatives through the Protocol's financial mechanism, the Global Environment Facility (GEF)





# When will the Nagoya Protocol enter into force?

- Open for signature at the UN Headquarters in New York from 2 February 2011 until 1 February 2012.
- Will enter into force 90 days after the date of deposit of the 50th instrument of ratification by a Party to the CBD

