WEBINAR
IMPLEMENTATION OF BASIC PROVISIONS OF ACCESS AND BENEFIT SHARING IN THE PACIFIC,
THE CASE OF BIOPROSPECTING

28 MAY 2020
LAYOUT OF PRESENTATION

1. Overview of ABS
2. Introducing Bioprospecting
3. Examples of bioprospecting
4. Interim Measures
5. Monitoring
OVERVIEW

The Nagoya Protocol relates to **ACCESS** of genetic resources and associated traditional knowledge and **BENEFIT SHARING** from the utilization of such resources & knowledge.
Genetic resource?
A genetic resource is defined as any non-human genetic resource.

‘Utilisation’ refers to research and development on the genetic and/or biochemical composition of genetic resources.

The Protocol, therefore, relates to both commercial and academic research.
WHAT IS ACCESS & BENEFIT-SHARING?

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**)
WHAT KIND OF ACTIVITIES INVOLVES ABS

- conducting research and development on the genetic and/or biochemical composition of genetic resources (bioprospecting)

- process of researching the beneficial properties of genetic material or biochemical compounds and using these properties to develop new products.

For example, companies can use genetic resources to develop specialty enzymes, enhanced genes, or small molecules. These can be used in crop protection, new plant varieties, drug development and the production of specialized chemicals.
Cosmetic Sector & drug discovery: research on plant extracts, oils and molecules to develop new ingredients with moisturizing, firming, anti-ageing or other properties, fragrances.

Food and beverage sector: research into the beneficial properties of micro-organisms, molecules or active compounds for new ingredients and products. For example, the development of a new natural colorant derived from fruit pulp for use in food products. Similarly, ABS would be relevant for companies looking to scientifically prove the antioxidants in a traditional medicinal plant and developing a health beverage boasting these properties.
WHERE IT DOESN’T APPLY

Buying and selling commodities and other plants, crops or biological material that is already traded does not fall under the Nagoya Protocol.

However, this is only as long as the aim is only production or consumption and no research and development activities are undertaken.

For example, buying seeds in a market to produce breakfast cereals is not considered ‘utilization of genetic resources.’ However, if the seeds were analyzed for their genetic or nutritional properties, in order to develop an extract or conduct plant breeding, such activities would be considered within the realm of ABS.
The Nagoya Protocol gives provider countries the rights to control access to genetic resources found within their jurisdiction.

1. An originating country where the genetic resource exists **in situ**, i.e. genetic resource exists in its natural habitat.

2. An originating country where the genetic resource exists **ex situ**, i.e. genetic resource exists outside of its natural habitat. A country falling within this category must have obtained the genetic resource from an originating country under the CBD.
BIOPROSPECTING

• Conducting research and development on the genetic and/or biochemical composition of genetic resources.

• Bioprospecting is the process of discovery and commercialization of new products based on biological resources. These resources or compounds can be important for and useful in many fields, including pharmaceuticals, agriculture, bioremediation, and nanotechnology, among others.
A TYPICAL PROCESS OF BIOPROSPECTING / BIODISCOVERY

Phase 1
• Collection of samples marine or terrestrial or both

Phase 2
• Identification of compounds
• Isolation of compounds
• Characterisation / production of specific compounds.

Phase 3
• Screening of bioactivity
• Confirmation for bioactivity

Phase 4
• Product development & Testing
• Commercialisation
Bioprospecting of Marine Macrophytes Using MS-Based Lipidomics as a New Approach
https://doi.org/10.3390/md14030049
Mandatory Requirements

1. Prior Informed Consent (PIC)
2. Mutually Agreed Terms (MAT) – *Contract, Agreement, MoU*
3. Legal Personality
Based on the fundamental principles of prior informed consent (PIC) and mutually agreed terms (MAT) enshrined in the Convention on Biological Diversity
BENEFIT SHARING
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.

- 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).
MONETARY BENEFITS EXAMPLES

- Access fees/fee per sample collected or otherwise acquired;
- Up-front payments;
- Milestone payments;
- Payment of royalties;
- License fees in case of commercialization;
- Special fees to be paid to trust funds supporting conservation and sustainable use of biodiversity;
- Salaries and preferential terms where mutually agreed;
- Research funding;
- Joint ventures;
- Joint ownership of relevant intellectual property rights.
NON MONETARY BENEFITS

- Sharing of research and development results;
- Collaboration, cooperation and contribution in scientific research and development programs;
- Participation in product development;
- Collaboration, cooperation and contribution in education and training;
- Strengthening capacities for technology transfer;
- Institutional capacity-building;
- Human and material resources to strengthen the capacities for the administration and enforcement of access regulations;
- Training related to genetic resources with the full participation of countries providing genetic resources, and where possible, in such countries;
- Access to scientific information relevant to conservation and sustainable use of biological diversity, including biological inventories and taxonomic studies;
- Research directed towards priority needs, such as health and food security, taking into account domestic uses of genetic resources in the Party providing genetic resources;
How does the Nagoya Protocol address traditional knowledge associated with genetic resources?

It ensures that indigenous and local communities obtain a **fair share of the benefits** from the use of their traditional knowledge associated with genetic resources.

- 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.
Nagoya Protocol: ABS mechanism

**PROVIDER COUNTRY**
- PIC
- MAT
  - Terms of Use;
  - Benefit-sharing (monetary or non-monetary)
- Permit

**USER COUNTRY**
- Utilization of GRs
- Monitoring of compliance: Checkpoints

GRs/aTK + Certificate

Benefit-sharing

Notified to ABS Clearing-House

International Certificate of Compliance
To Contact Us

(GEF-UNEP) SPREP ABS Project
P. O Box 240  | Ph: (685) 21929
Email: rahulc@sprep.org  | ofak@sprep.org
          | www.sprep.org
Vailima, Apia SAMOA

THANK YOU