

Legal and institutional frameworks to harness the potential of marine bioprospecting in SIDS

UNCTAD side event:
Sustainably harnessing the potential of marine bioprospecting for socioeconomic development in Small Island Developing States (SIDS)

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Core legal questions in relation to sustainable harnessing of marine bioprospecting potential in SIDS:

Within national jurisdiction



- How can SIDS sustainably promote and manage their bioprospecting potential?
- How to ensure equitable sharing of benefits from marine bioprospecting resources?
- How to ensure required national facilities, technologies and capacities for effective bioprospecting?

Beyond national jurisdiction

- Under negotiations: how to best position SIDS and safeguard their interests?

International legal framework: Sustainable Use, Access and Benefit sharing (ABS), Transfer of Technology

Convention on biological diversity (CBD), 1992

- 196 Parties, incl. all 38 UN members in the SIDS group
- Objective: “conservation of biological diversity”; “the sustainable use of its components and the fair and equitable sharing of the benefits”, incl. appropriate access and transfer of relevant technologies (Art. 1)
- Specific ABS commitments:
 - ü Traditional knowledge, innovations and practices (8j)
 - ü Sustainable Use of Components of Biological Diversity (Art. 10);
 - ü Access to Genetic Resources, incl. state sovereignty, prior informed consent, fair and equitable sharing of benefits (Art. 15)
 - ü Access to and Transfer of Technology (Art. 16)
 - ü Handling of Biotechnology and Distribution of Benefits (Art. 19)
- At the national level, basic regulatory elements: (i) requiring prior informed consent (PIC) for access to genetic resources and (ii) conclusion of mutually agreed terms (MAT) on benefit sharing as a result of genetic resources utilization

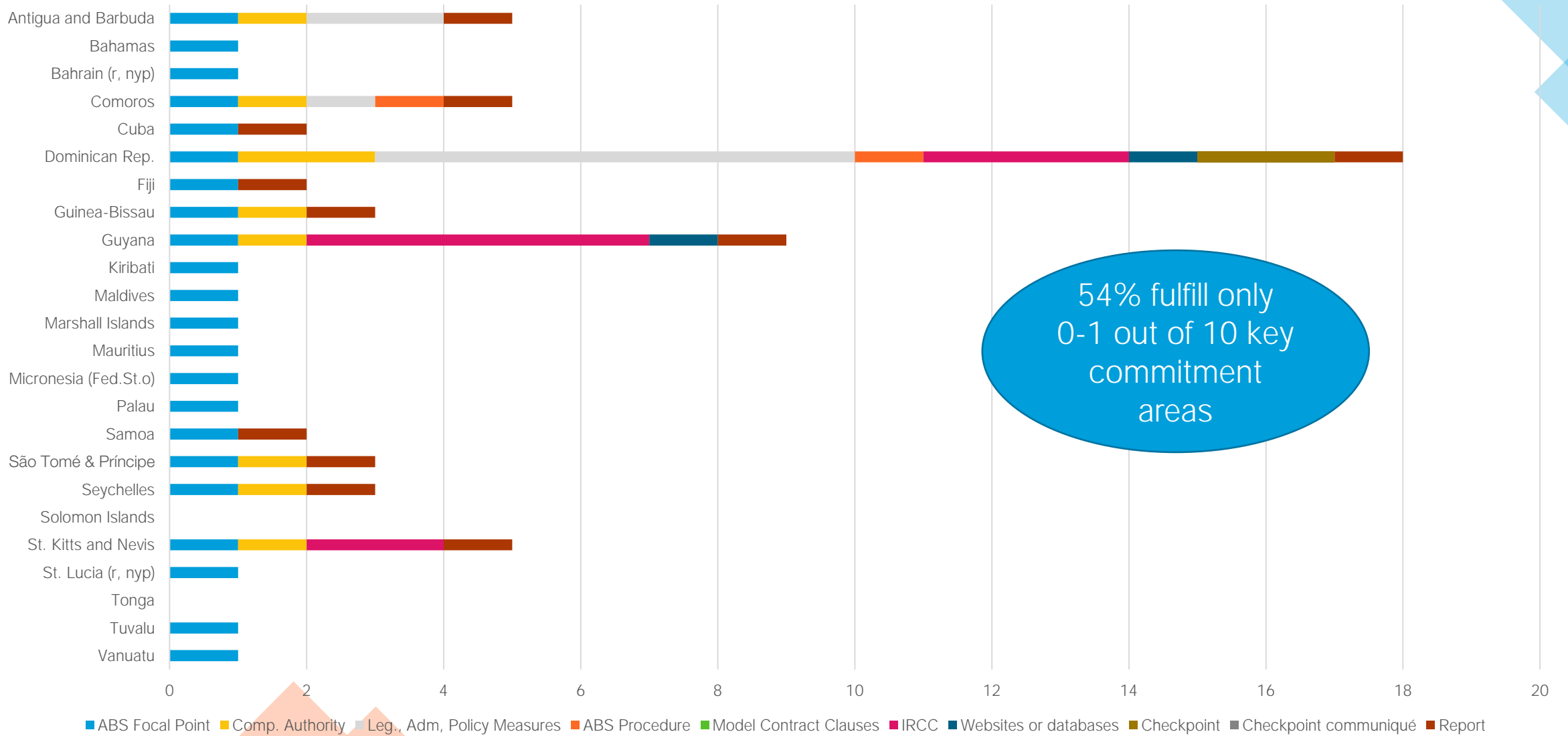
Nagoya Protocol to CBD on access and benefit sharing, 2010

- 133 Parties (136 ratifications, 92 signatures), incl. 24 of the SIDS group

Objective: “fair and equitable sharing of the benefits arising from the utilization of genetic resources [...]” (Art. 1)

- ü Access to genetic resources based on state sovereignty and PIC (Art. 6.1)
- ü PIC or approval and involvement of indigenous and local communities (ILC) (Art. 6.2)
- ü Fair and equitable benefit-sharing with the providing Party, based on MAT and established through legislative, administrative or policy measures (Art. 5.1 and 5.3)
- ü Benefit-sharing with ILC (Art. 5.2 and 5.5)
- ü Benefits may be monetary or non-monetary (Art. 5.4, ref. Annex)
- ü Requirement to take legislative, administrative or policy measures to provide legal certainty, clarity and transparency on PIC and access (Art. 6.3)
 - à Permit à ABS-Clearing House à Internationally Recognized Certificate of Compliance (IRCC)
- ü Establish measures to ensure application of PIC and MAT on access to GR and traditional knowledge; address non-compliance à checkpoints
- ü ABS Clearing House: 10 point monitoring

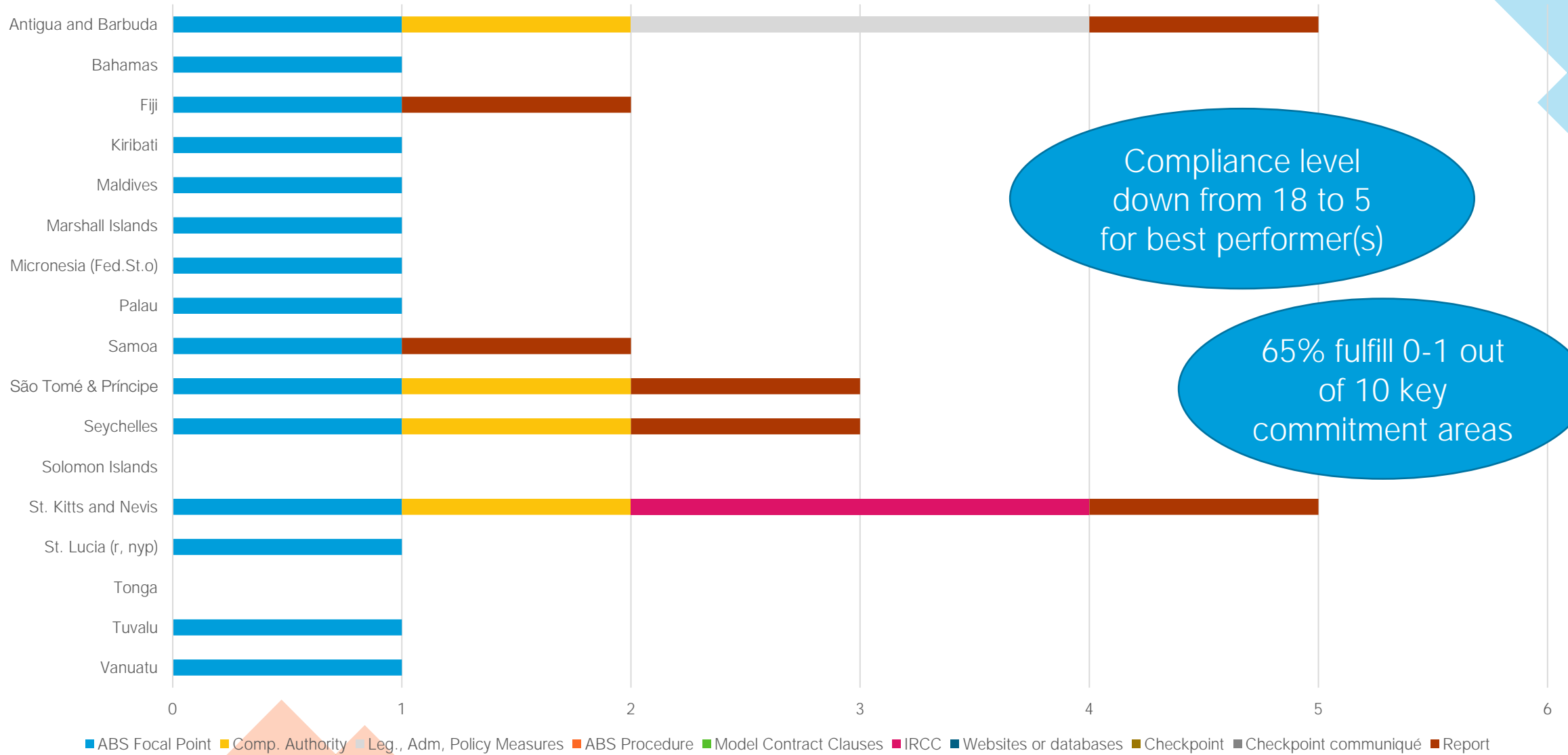
Compliance of SIDS Parties* to Nagoya Protocol



Source: UNCTAD based on ABS-CH

Notes: List of 38 SIDS of OHRLLS applied. Parties* include 2 countries that have ratified the NP but are not yet Parties.

Compliance of SIDS Parties* to Nagoya Protocol, analytical list



Compliance level down from 18 to 5 for best performer(s)

65% fulfill 0-1 out of 10 key commitment areas

Source: UNCTAD based on ABS-CH

Notes: Analytical list of SIDS applied, source: <https://dgff2021.unctad.org/unctad-and-the-sids/>. Parties* include 1 country that has ratified the NP but is not yet Party.

Dominican Republic

- Party to the Nagoya Protocol since 2015

Compliance area	Detailed functions
1 ABS National Focal Point	CBD; Cartagena Protocol; BCH; ABS; Clearing-House Mechanism
2 Competent National Authorities	1 (Ministerio de Medio Ambiente y Recursos Naturales) receives applications from ventanilla única and issues authorization; 1 (BD director) follows up on access applications, incl. consultations with external experts and communities
7 Legislative, Administrative or Policy Measures	<ol style="list-style-type: none">1. Constitution, June 20152. General Law on Environment and Natural Resources (64-00), Aug. 20003. Regulation on investigation in protected areas and biodiversity, complementing the previous4. Sectoral Law on Biodiversity (333-15), Dec. 20155. Regulation on Access to Genetic Resources and Distribution of Benefits (ABS), Jan. 20186. Policy on Access to Genetic Resources and Distribution of Benefits (ABS), 20187. Vision 2025 (Biodiversity), May 2005
1 ABS Procedure	Process of application for access contract to genetic resources and associated traditional knowledge, <60-day process with dedicated forms, explained through flowchart (2018)

Dominican Republic Ctd.

Medolife's Therapeutic Scorpion Peptide Proves Successful in Treating COVID-19 Patients in Dominican Republic Study

Compliance area	Detailed functions
3 IRCC	<p>2 non-commercial: Crustaceans (<i>Gecarcinus lateralis</i> or blackback land crab), with Colorado State univ; and (terrestrial) Buthidae family scorpions, esp. <i>Rhopalurus</i> (investigation for cancer treatment and other therapeutics) with pharmaceutical company Medolife (2008-2009);</p> <p>1 commercial: (terrestrial) <i>Rhopalurus princeps</i> scorpion with pharmaceutical company Medolife (2017-2023) – access contracts on (i) investigation and (ii) benefit sharing* concluded.</p>
National Websites or Databases	Environmental information system (Sistema de Información Ambiental (SIA)), Ministerio de Medio Ambiente y Recursos Naturales
Checkpoint	<ol style="list-style-type: none"> Dirección de Biodiversidad, Viceministerio Areas Protegidas y Biodiversidad, MinMARN Ministerio Educación Superior, Ciencia y Tecnología (MESCYT)
1 Interim national report	<ul style="list-style-type: none"> Published Feb 2018, some key legislation not yet in place at the point of reporting Model contracts: Access model contract and Benefit sharing model contract

Bahamas

(Vivas & Meyer, 2019)

- Party to Nagoya Protocol only since 30 Mar 2022; only ABS Focal Point in place
- Marine genetic resource utilization: Pseudopterosin extracted from soft coral

Pseudoptero-gorgia elisabethae

- Investigated in 1982 and patented in 1988 by a US university (anti-inflammatory properties)
- Commercialized through the cosmetics industry as of 1995 (patent license fees to the university)
- Initially ABS agreement for tripartite experimental coral harvest, renegotiations unsuccessful
- Finally permit extension, incl. benefits to the Bahamas Government (royalties and other payments as interim benefit sharing)
- Issues with long-term sustainability within resource management

Learning from international experiences



Key success factors collected from previous research

1. Map and list bioprospecting potential
2. Effectively transfer and implement international commitments at the national level by creating a functional and supportive legal framework
3. Establish clear national goals and implementing policies
4. Ensure sustainable management of resources
5. Strengthen and leverage scientific and technological capacity
6. Establish partner networks (incl. local universities and research centers)
7. Leverage traditional knowledge
8. Build local capacity, incl. employment
9. Mainstream biodiversity into policies across the board
10. Design model contractual clauses with key elements of sustainable resource management, benefit sharing and development aspects while ascertaining clarity and transparency



Thank you!

