

Aufbau von ABS-Regelungen in Provider-Staaten

Erfahrungen der ABS Capacity Development Initiative

Dr. Hartmut Meyer

ABS Capacity Development Initiative
01.03.2016, Berlin

funded by



Federal Ministry
for Economic Cooperation
and Development



implemented by



Programme Implementing
the Biodiversity Convention

Die globale ABS-Diskussion

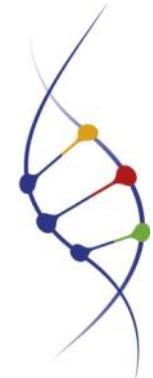


Gerechtigkeit

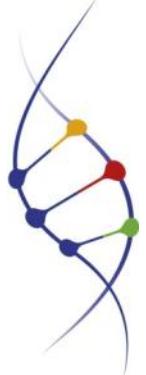
Souveränität

Traditionelles
Wissen

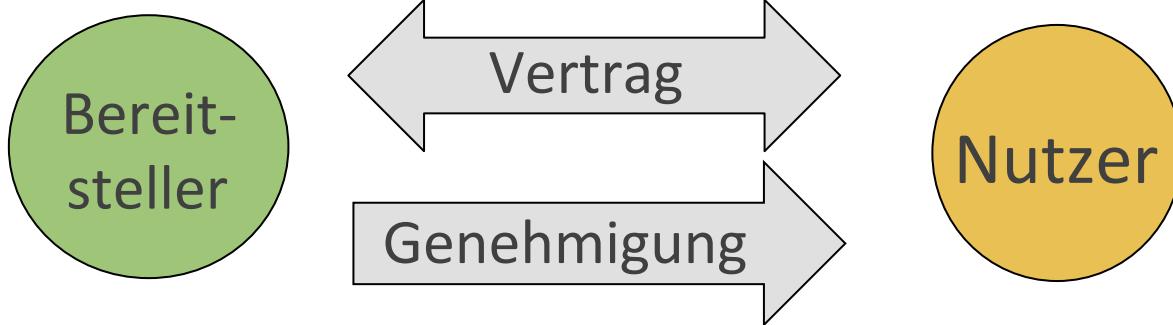
Menschenrechte



ABS-Logik der CBD



“ressourcenreiche” Länder sollen den Zugang zu genetischen Ressourcen erleichtern



“technologie-reiche” Länder ergreifen Maßnahmen mit dem Ziel, die Ergebnisse der Forschung und Entwicklung und die Vorteile, die sich aus der kommerziellen und sonstigen Nutzung der genetischen Ressourcen ergeben, ausgewogen und gerecht zu teilen

Völkerrechtliche Rahmensetzung



Souveränität und Eigentum

1962: Resolution 1803 (XVII) der UN Generalversammlung erklärt das "right of peoples and nations to permanent sovereignty over their natural wealth and resources"

1992: Laut Art. 15.1 der CBD liegt aufgrund der souveränen Rechte der Staaten in Bezug auf ihre natürlichen Ressourcen die Befugnis, den Zugang zu genetischen Ressourcen zu bestimmen, bei den Regierungen der einzelnen Staaten

2007: Art. 31.1 der UN Erklärung über die Rechte der indigenen Völker stellt das Recht indigener Völker auf die Bewahrung, die Kontrolle, den Schutz und die Weiterentwicklung u.a. ihrer genetischen Ressourcen und ihres Saatguts sowie ihres geistigen Eigentums an diesem kulturellen Erbe fest.

Auf dem Weg zum Nagoya Protokol



2002: Bonner ABS Leitlinien der CBD

- Hilfestellung bei der Erstellung nationaler ABS-Systeme

2002: WSSD Johannesburg Plan of Implementation

- 42 (o) Negotiate within the framework of the Convention on Biological Diversity, bearing in mind the Bonn Guidelines, an international regime to promote and safeguard the fair and equitable sharing of benefits arising out of the utilization of genetic resources

2004: CBD-Verhandlungsmandat über ein ABS-Instrument

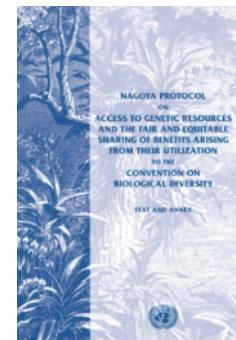
- Auftrag zur wirksamen Umsetzung der CBD Artikel 15 (genetische Ressourcen) und 8j (dazugehöriges traditionelles Wissen)

Bedeutung des Nagoya Protokolls



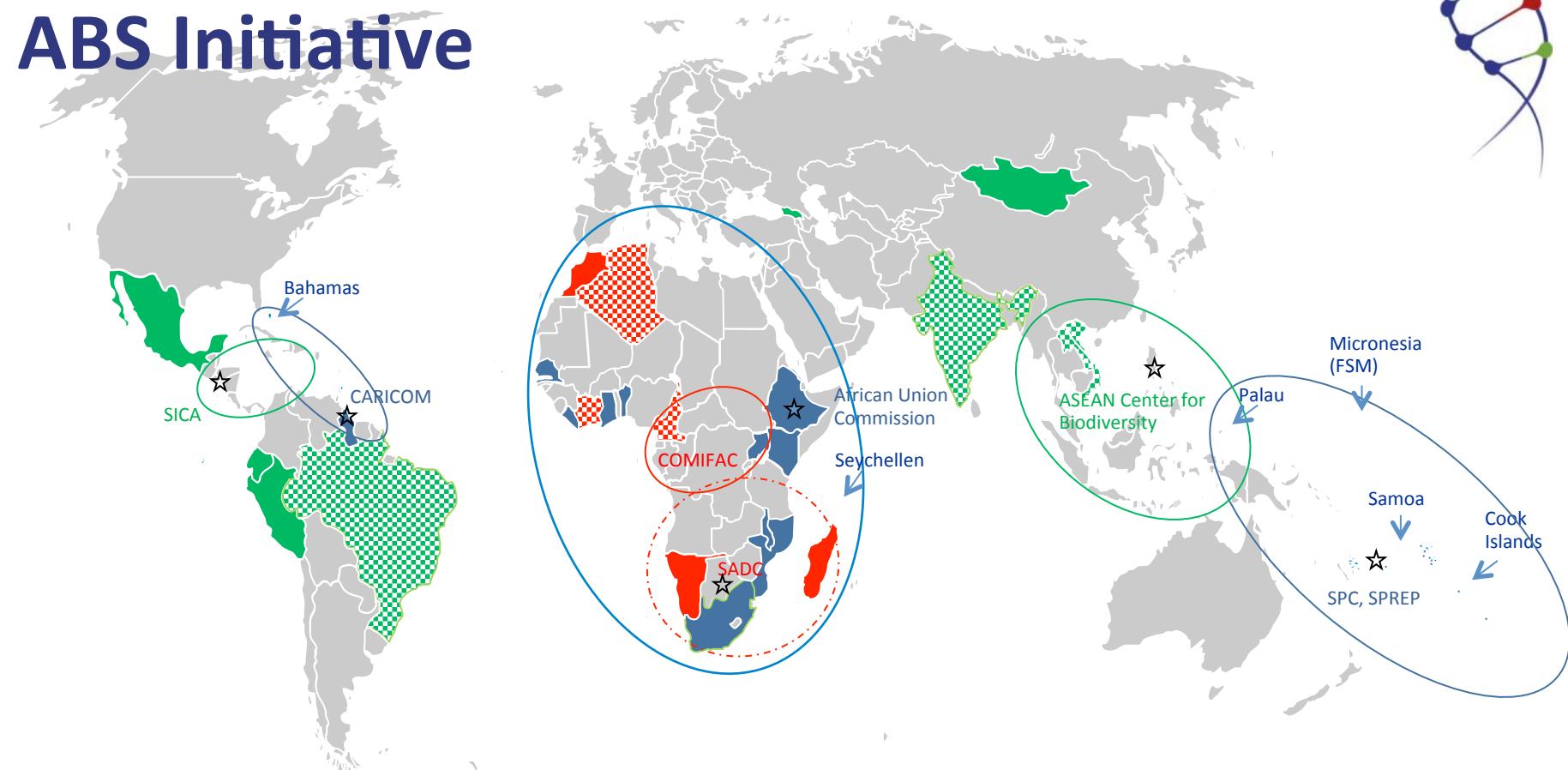
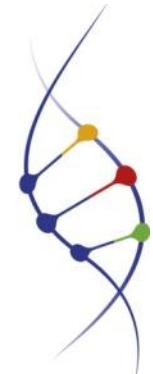
Festlegung internationaler Definitionen und Prinzipien

- Geltungsbereich wird durch neue Begriffsbestimmung präzisiert und in Bezug auf CBD eingeschränkt
- Förderung der Rechtssicherheit, Klarheit und Transparenz für Bereitsteller und Nutzer, Mitglieder müssen:
 - a) ausgewogene und nicht willkürliche Regeln und Verfahren für den Zugang aufstellen
 - b) Maßnahmen ergreifen, um die Vorteilsaufteilung sicherzustellen
 - c) die Nutzung genetischer Ressourcen überwachen und die Einhaltung von ABS-Gesetzgebung durch den Nutzer sicherstellen



2016: 10 Jahre Globales Vorhaben

ABS Initiative



		<u>Regional Organisations</u>
Bahamas	Liberia	
Benin*	Malawi	AUC
Cook Islands	Mosambik	CARICOM
Ethiopia	Palau	SPC & SPREP
FS Micronesia	Samoa	
Ghana	Senegal	
Guyana	South Africa	
Kenya	Uganda	

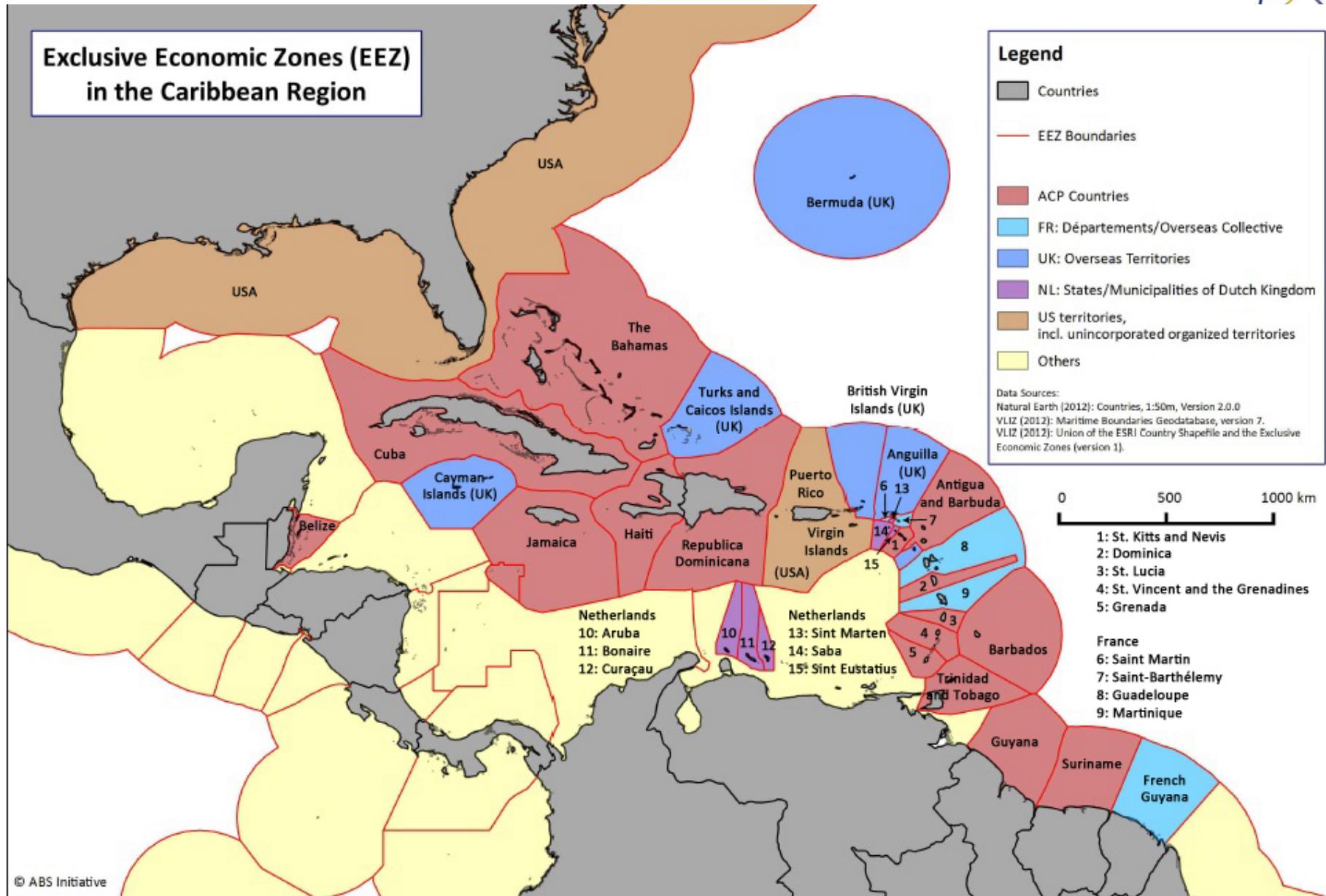
	<u>Regional Organisations</u>
Algeria	
Côte d'Ivoire	COMIFAC
Cameroon	
Madagascar	SADC
Morocco	
Namibia	

	<u>Regional Organisations</u>
Brasil	
Ecuador	ASEAN Center for Biodiversity
Mexico	
Peru	SICA



Zusammenarbeit in der Karibik

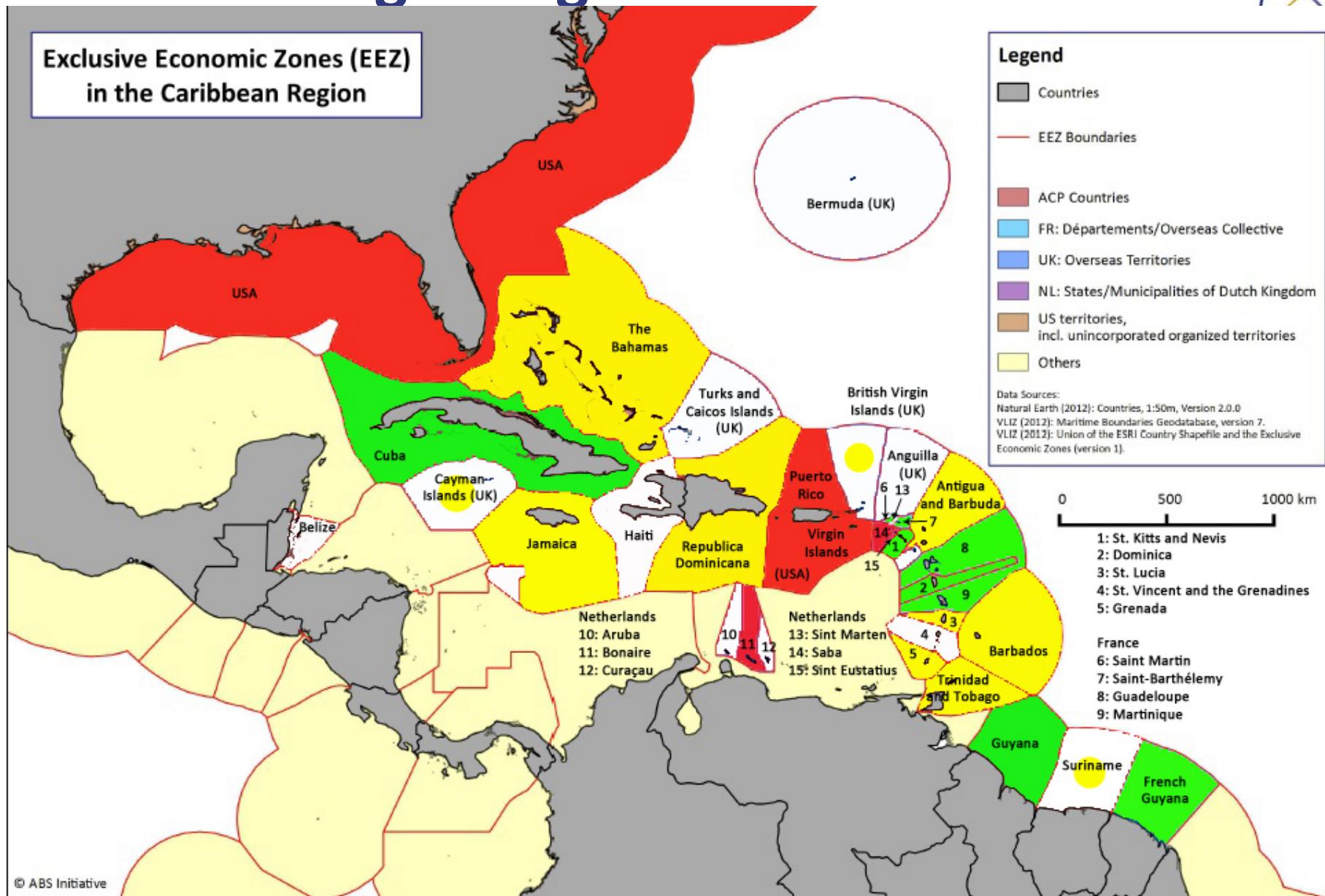
Exclusive Economic Zones (EEZ) in the Caribbean Region



ABS-Gesetzgebung in der Karibik



Exclusive Economic Zones (EEZ)
in the Caribbean Region



ABS-Aktivitäten in der Karibik



Nationales GEF-Projekt in den Bahamas (Sommer 2016)

- Die Bahamas sind „hot spot“ für den Zugang zu genetischen Ressourcen (bis zu 100 Forschungsgenehmigungen pro Jahr, kein ABS-Gesetz)
- Extrakte aus Weichkoralle *Antillogorgia elisabethae* mit ABS-Vertrag durch US- Chemiefirma an Kosmetikfirmen verkauft (ca. 0,9 Mill USD Vorteilsausgleich seit 2001)
- Einsatz in ca. 150 Produkten (50% Estée Lauder, ohne ABS-Verträge mit Kosmetikfirmen)
- Salinosporamide A aus obligat marinischen Aktinomyzeten *Salinispora tropica* wird in klinischen Tests Stufen I und II gegen Krebs untersucht (ohne ABS-Vertrag)

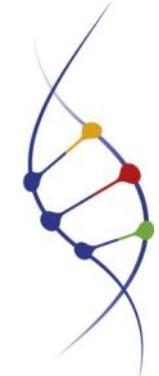
ABS-Aktivitäten in der Karibik



Nationales GEF-Projekt in den Bahamas (Sommer 2016)

- Unterstützung bei Gesetzgebung und Institutionenaufbau für ein nationales ABS-System
- Entwicklung eines IT-basierten Überwachungssystems zur automatischen Nachverfolgung von Publikationen und Patenten
- ABS-Piloten:
 - Informationsmaterial und Fortbildungskurse für Forscher (Gerace Research Centre, BS)
 - ABS-Richtlinien für ex situ Sammlungen (Antiquities, Monuments and Museums Corporation, BS)
 - Feldforschung für Managementsystem zur Ernte von *Antillogorgia* (University of Buffalo, US)

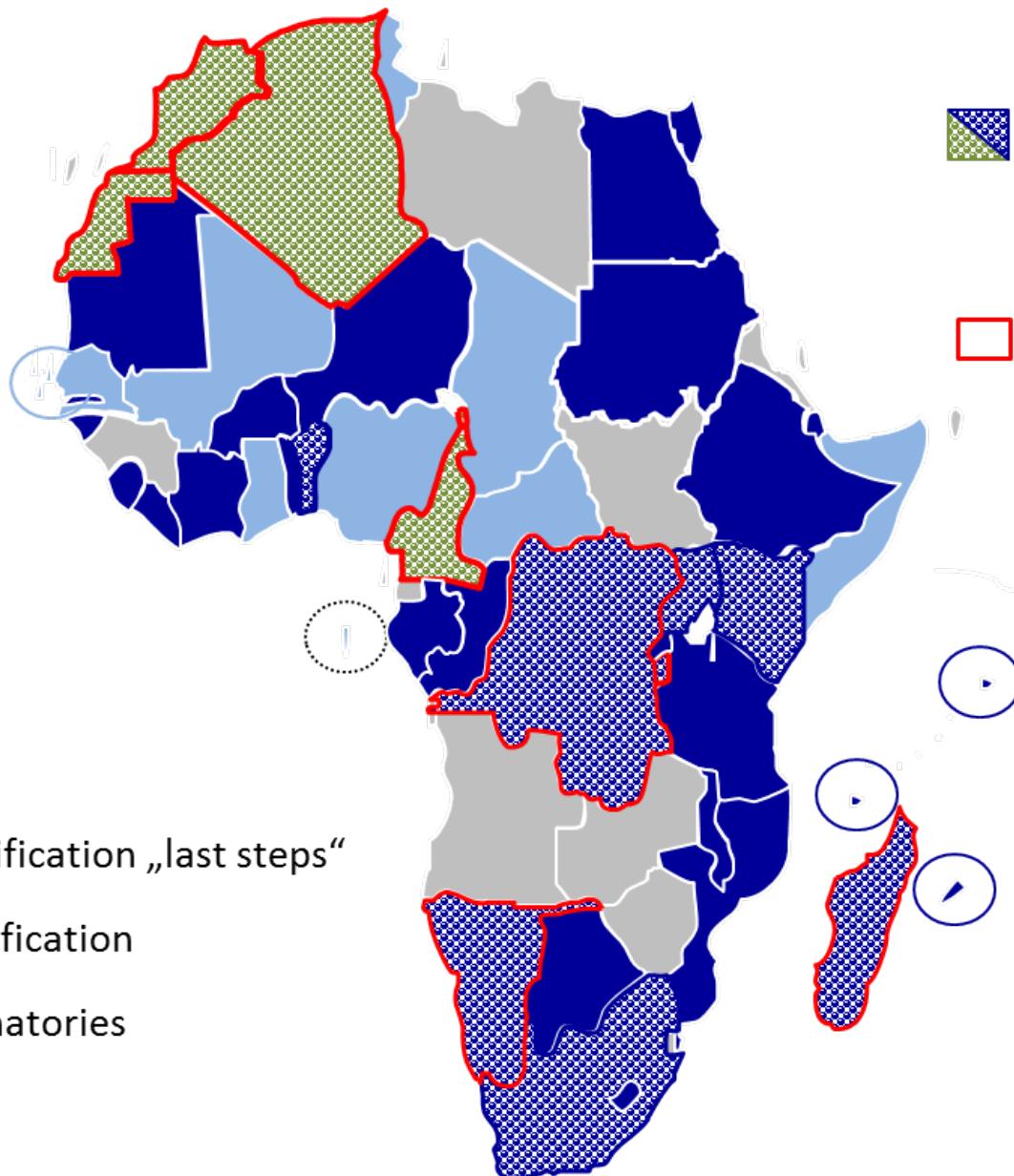
ABS-Aktivitäten in der Karibik



Regionales GEF-Projekt für CARICOM-Staaten

- Unterstützung von IUCN Mittelamerika bei der Umsetzung (ab 2016)
 - Nationale ABS-Workshops
 - Nationale Berater für den Aufbau von ABS-Systemen
 - Informationsmaterial
- Eigene Projekte in ausgewählten Staaten in spezifischen Bereichen (ab 2017)

ABS-Aktivitäten in Afrika



■ Partner countries
to the ABS Initiative

□ Countries with BMZ funded
projects on ABS

Algeria
Burundi
Cameroon
DR Congo
Madagascar
Morocco
Namibia
Benin
Kenya
South Africa
Uganda

Partnerland Uganda



ABS-System ist vorhanden, wird aber kaum angewandt



**THE NATIONAL ENVIRONMENT
(ACCESS TO GENETIC RESOURCES AND
BENEFIT SHARING) REGULATIONS, 2005**



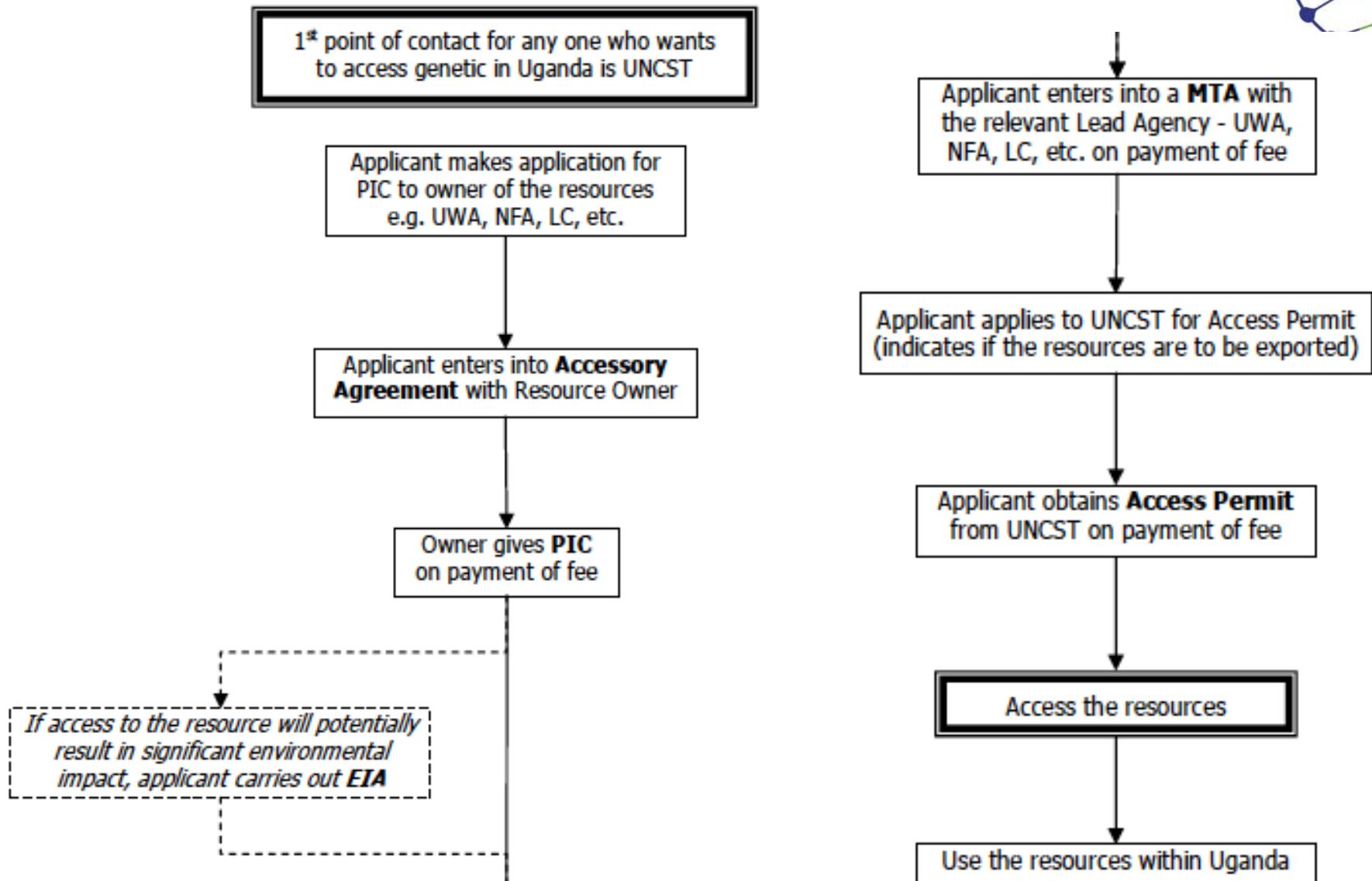
THE REPUBLIC OF UGANDA

**GUIDELINES FOR ACCESSING GENETIC RESOURCES
AND BENEFIT SHARING IN UGANDA**

NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY
MINISTRY OF WATER AND ENVIRONMENT

FIRST EDITION
JUNE 2007

ABS Flowchart Uganda



Partnerland Uganda



Unterstützung beim Aufbau eines wirksamen ABS-Systems

- Review of the legal, institutional and administrative ABS framework (review of existing ABS law e.g. with regard to exemptions for national researchers and more stringent enforcement with regard to commercial users, harmonised implementation for wild and agricultural GR, online application and monitoring system)
- Studies on the utilisation of GR and aTK from Uganda (based on publication and patents landscape analysis)
- ABS pilot cases (e.g. *Prunus africana*: stakeholder forum, participation of local communities, resource management plans)

Partnerland Südafrika



ABS-System wird im Kontext der Bioökonomiestrategie genutzt



Government Gazette

REPUBLIC OF SOUTH AFRICA

Vol. 467 Cape Town 7 June 2004 No. 26436

THE PRESIDENCY

No. 700

7 June 2004

It is hereby notified that the President has assented to the following Act, which is hereby published for general information:-

No. 10 of 2004: National Environmental Management: Biodiversity Act, 2004.

4 No. 30739

GOVERNMENT GAZETTE, 8 FEBRUARY 2008

No. R. 138

8 February 2008

NATIONAL ENVIRONMENTAL MANAGEMENT: BIO-DIVERSITY ACT, 2004 REGULATIONS ON BIO-PROSPECTING, ACCESS AND BENEFIT-SHARING

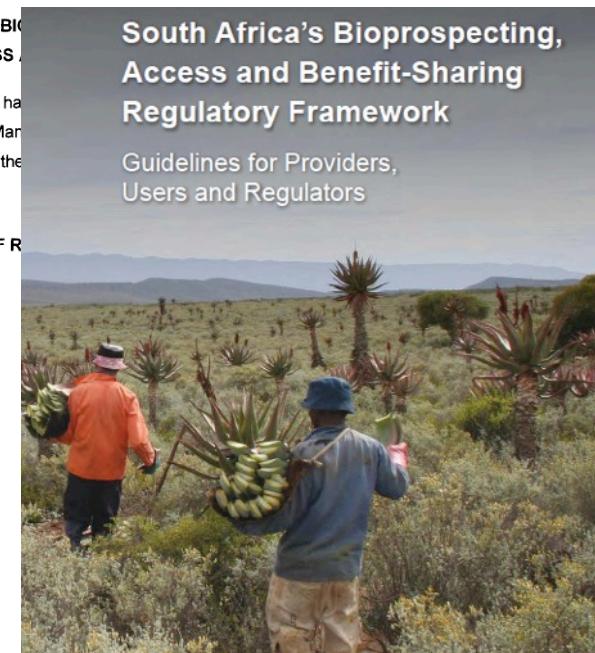
The Minister of Environmental Affairs and Tourism has, in terms of section 10(1)(e), (f), (g) and (h) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), made the Regulations in the manner set out below:

INTERPRETATION AND PURPOSE OF REGULATIONS

1. Definitions
2. Purpose of Regulations
3. Application of Regulations

South Africa's Bioprospecting, Access and Benefit-Sharing Regulatory Framework

Guidelines for Providers,
Users and Regulators



environmental affairs
Department of Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Partnerland Südafrika



Basisdefinitionen

- Access – Its ordinary meaning in the context of biodiversity use relates to acquiring indigenous biological resources or traditional knowledge for the purposes of bioprospecting or any other kind of research.
- Bioprospecting – Relates to any research on, or development or application of, indigenous biological resources for commercial or industrial exploitation.
- Indigenous species – any species that occurs, or has historically occurred, in a free state in nature within the borders of South Africa. It excludes any species that has been introduced to South Africa as a result of human activity.

Partnerland Südafrika



Basisdefinitionen

- Discovery phase of bioprospecting – Any research on, or development or application of, indigenous biological resources where the nature and extent of any actual or potential commercial or industrial exploitation in relation to the project is not sufficiently clear or known to begin the process of commercialisation
- Commercialisation phase of bioprospecting – The phase in bioprospecting where the nature and extent of any actual or potential commercial or industrial exploitation in relation to the project is sufficiently established to begin the process of commercialisation. Activities seen as ‘commercialisation’ may include the filing of intellectual property, commencing clinical trials and product development, or the multiplication of indigenous biological resources



You are approached by a company or researchers who want to use your TK and/or IBR

They want to do purely scientific research

This research is excluded from the bioprospecting framework. You may or may not allow the researchers access to your IBR/TK

They are in the discovery phase of bioprospecting

They may want to use your IBR and/or TK. You may or may not allow them access to your IBR and/or TK

They must inform you of the nature and type of research they want to do and they have to notify the DEA accordingly

They have shown you that they have notified the DEA

Before you provide them access to your IBR/TK make sure they have given you a copy of their notification

They want to engage in commercial bioprospecting

They are in the commercial phase of bioprospecting

They want access to your TK. They need your consent prior to getting access to your TK

They have provided you with all the relevant information and you want to provide access to your TK

They will have to negotiate a BSA

You will have to provide the bioprospector with a community resolution

Before you give access to your TK make sure you have a copy of the permit application

You hold land and they want access to your IBR (and/or TK if applicable). Before they can have access, they have to get your consent

They have provided you with all the relevant information and you are keen on providing access to your IBRs

They will have to fill out an MTA with you

They will have to negotiate a BSA with you

If you are an indigenous community you will have to provide the bioprospector with a community resolution

Before you give access to your IBRs (and TK, if applicable) make sure you have a copy of the permit application

Partnerland Südafrika



Unterstützung bei der Weiterentwicklung des ABS-Systems

- Improving and streamlining the South African ABS regulatory system (e.g. Nagoya obligations, electronic permitting system, generic biocultural community protocol approach)
- Supporting the implementation of the Biodiversity Economy Strategy (e.g. best cases, ABS pilots with integration of IPLCs, stakeholder for a)
- Tools and training for communication, education and public (CEPA) (e.g. tool integrating issues of value chain development, local participation, business opportunities)

Deutsche-Indische Kooperation

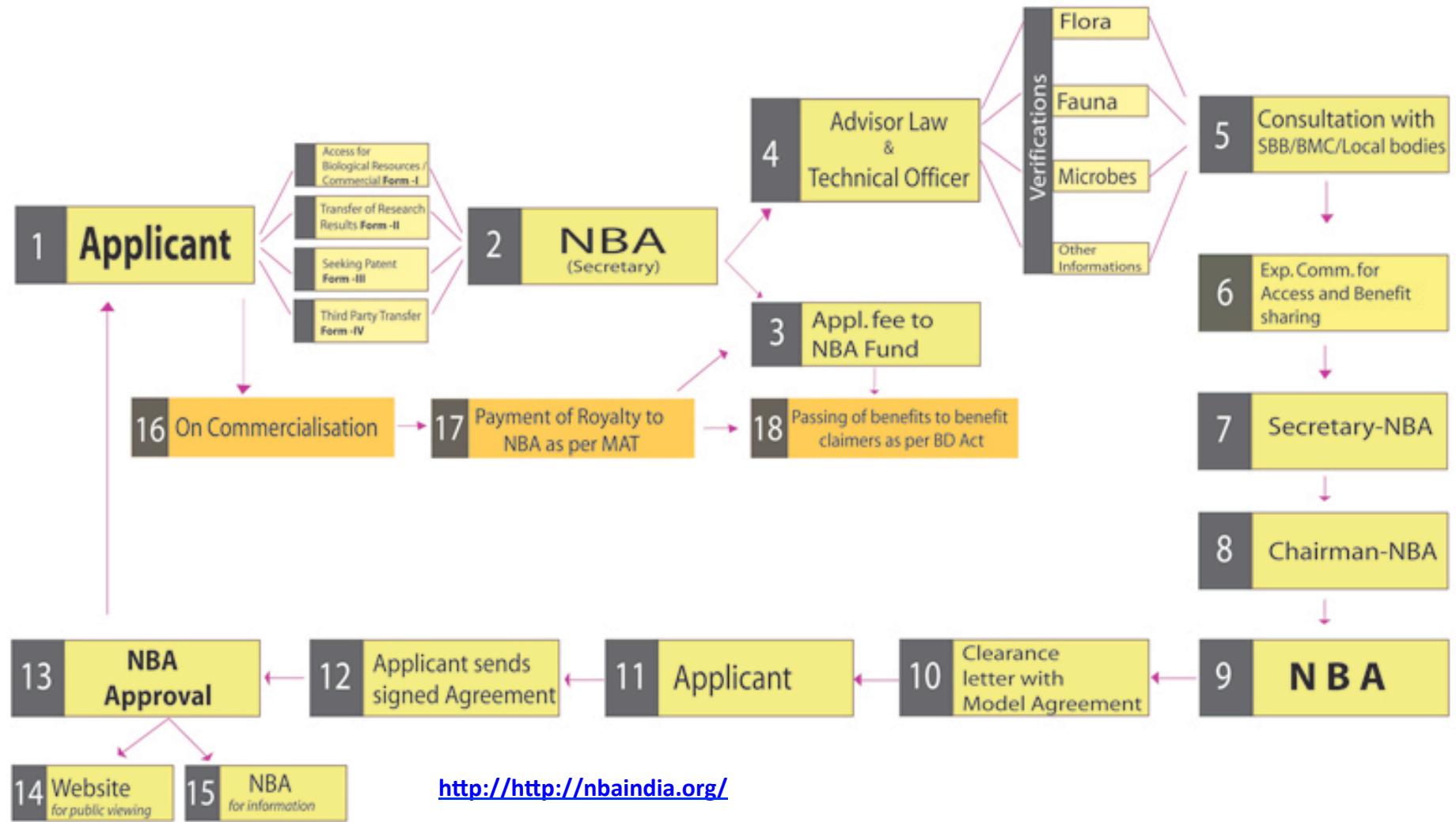
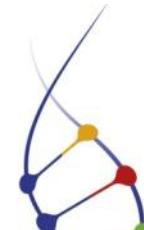


Umsetzung der ABS-Gesetzgebung im Subkontinent

Das indische ABS-System beruht auf drei Säulen

- **National Biodiversity Authority:** zuständig für ausländische wissenschaftliche und kommerzielle Nutzer, Forschungskooperationen mit dem Ausland, Vorteilsausgleich bei indischer Patentanmeldung
- **State Biodiversity Boards:** in allen 29 Bundesstaaten, zuständig für indische kommerzielle Nutzer, 21 (72%) mit State Rules
- **Biodiversity Management Committees:** 37.769 (15%) in 246.245 Panchayati Rajs, zuständig für Peoples Biodiversity Registers und Local Biodiversity Funds

ABS Flowchart für Indien



Deutsche-Indische Kooperation



Großes Potential für Vorteilsausgleich mit lokaler Ebene

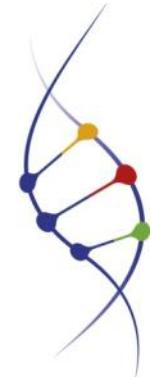
- 95% des finanziellen Vorteilsausgleichs muss an die Gemeinde, aus dem die Ressource stammt, weitergeleitet und dort für Biodiversitätszwecke investiert werden
- Alle indischen kommerziellen Aktivitäten, bei denen Produkte wie Phytopharmaka oder Kosmetik mit indischen genetischen Ressourcen hergestellt werden, sind ABS-pflichtig
- Das indische ABS-System wird erst seit 2014 konsequent in der Fläche umgesetzt
- Es sind bislang keine Zahlen zum finanziellen Vorteilsausgleich aus den Bundesstaaten bekannt
- Formen des nicht-finanziellen Vorteilsausgleich wurde bislang nicht spezifiziert und vernachlässigt

ABS-Verträge mit NBA



Year wise status of applications	Form I Access to Bioresources for Research /Commercial Purpose	Form II Transfer of Research Results	Form III Approval for obtaining IPR	Form IV Third Party Transfer	Form B	Total
2006-2007	4	1	0	2	0	7
2007-2008	3	3	11	6	0	23
2008-2009	4	4	21	6	0	35
2009-2010	2	1	9	1	0	13
2010-2011	3	1	4	1	0	9
2011-2012	1	2	6	0	0	9
2012-2013	1	0	8	7	0	16
2013-2014	1	0	14	2	0	17
2014-2015	19	0	22	1	0	42
2015-2016	19	1	20	1	5	46
Total	59	13	116	27	5	220

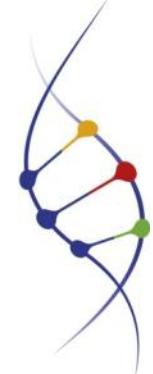
ABS-Verträge mit NBA



ABS-Verträge mit deutschen Nutzern

5	92	Dr. Bruno M Moerschbacher, Department of Biochemistry and Biotechnology, University of Muenster, Hindenburgplatz 55, D-48143 Munster, Germany.	I	Identification and characterization of chitin/chitosan modifying enzymes to elucidate their role in endosymbiosis, potentially biotechnological use of the enzymes to generate defined chitin/chitosan derivatives with known biological activities.	Three leaves from each of the fifteen dicot tree species for isolating Endophytic Fungi (microorganism) living inside leaf tissue in Mudumalai Wildlife Sanctuary	19.04.2007
10	151	Prof. Dr. Bruno M. Moerschbacher, Dept. of Plant Biochemistry and Biotechnology, University of Munster, Hindenburgplatz 55, D 48143 Munster, Germany.	I	Access of soil samples from a Chitin/Chitosan producing plant (Mahtani chitosan)	Mahtani Chitosan , 10 sample, 1 kg of soil per sample	27.05.2008

Deutsche-Indische Kooperation



Unterstützung bei der Realisierung des Vorteilsausgleichs

Bewusstseinschaffung

- Entwicklung und Umsetzung einer Kommunikationsstrategie
- Nutzung und Aufbau von Plattformen für Akteursdialoge

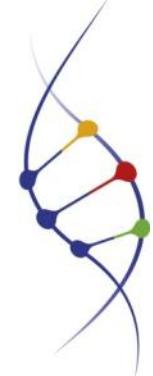
Gute ABS Praktiken

- Entwicklung sektor- und nutzerspezifischer „Gute ABS Praktiken“
- Unterstützung von mindestens 10 Gemeinden pro Projektstaat bei der Umsetzung von „Guten ABS Praktiken“

Überwachungssystem

- Entwicklung eines IT-gestützten Überwachungssystems
- Dialog mit indischen Nutzern zur Beachtung der gesetzlichen Bestimmungen und zur Information der Behörden über die Nutzung

Vielen Dank für die Aufmerksamkeit !



Kontakt

Dr. Hartmut Meyer

Berater, ABS Capacity Development Initiative

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
GmbH

Dag-Hammarskjöld-Weg 1-5

65760 Eschborn

t: +49 6196 793285

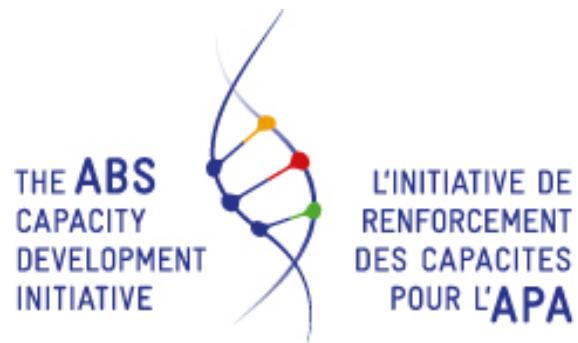
f: +49 6196 79803285

m: +49 171 1027839

e: hartmut.meyer@giz.de

e: [\(Sekretariat\)](mailto:abs-initiative@giz.de)

w: www.abs-initiative.info



Wie kann benefit sharing praktisch gestaltet werden?

Material für Arbeitsgruppe 4

Dr. Hartmut Meyer

ABS Capacity Development Initiative
02.03.2016, Berlin

funded by



Federal Ministry
for Economic Cooperation
and Development



implemented by



Programme Implementing
the Biodiversity Convention

Südafrika – Optionen für Vorteilsausgleich



Short-term benefit-sharing options

- Up-front payments
- Information
- Species inventories
- Acknowledgement of parties giving access to resources
- Voucher specimens with national institutions
- Access to international collections by South Africans
- Copies of photographs and slides
- Simplified and popularised posters, manuals, pamphlets and other documents translated into local languages
- Fees paid per sample collected

https://www.environment.gov.za/projectsprogrammes/babs_clearinghouse

Südafrika – Optionen für Vorteilsausgleich



Medium-term benefit-sharing options

- Access fees
- Other fees – such as for consultation, use of facilities and infrastructure
- Milestone payments
- Salaries of community members employed by the company – e.g. as assistants and guides
- Mutually agreed preferential terms
- Environmental education
- Research funding
- Sharing of research and development results
- Access to research data

Südafrika – Optionen für Vorteilsausgleich



Medium-term benefit-sharing options

- Copies of proposals, reports and publications provided
- Collaboration, co-operation and contribution in scientific research and development programmes – e.g. by including
- local assistants, guides and informants in the research process
- Ongoing communication of bioprospecting objectives, methods and findings, translated into local languages
- Student training and support
- Training related to biological resources
- Training of local people as appropriate in relevant scientific, legal and management issues

Südafrika – Optionen für Vorteilsausgleich



Medium-term benefit-sharing options

- Collaboration, co-operation and contribution in education and training
- Access to and transfer of technology and knowledge, particularly related to the biological resource
- Strengthening capacity for technology transfer
- Equipment and infrastructure support
- Human and material resources to strengthen capacity for the administration and enforcement of access regulations
- Access to scientific information relevant to conservation and sustainable use of biological diversity, including biological inventories and taxonomic studies

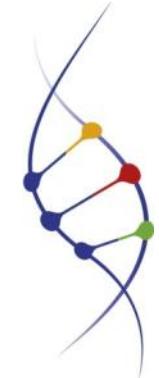
Südafrika – Optionen für Vorteilsausgleich



Long-term benefit-sharing options

- Social recognition
- Licence fees in case of commercialisation
- Payment of royalties
- Special fees paid into trust funds supporting conservation and sustainable use of biodiversity
- Joint ventures
- Supply contracts
- Co-ownership of relevant intellectual property rights
- Co-authorship of publications
- Participation in product development

Südafrika – Optionen für Vorteilsausgleich



Long-term benefit-sharing options

- Institutional capacity building
- Contributions to the local economy – e.g. grants for development and environmental education projects
- Community development projects
- Admittance to *ex-situ* facilities of biological resources
- Admittance to databases
- Recognition and promotion of traditional knowledge/use

Karibisches Land – nicht kommerzielle Forschung



Auszug aus Standardvertrag, Umsetzung von NP Art. 8(a)

- The Recipient shall not use the Material for work sponsored by any Company or for work to which any company has commercial right, or interest which creates a licensing obligation to any third party.
- If the parties hereto decide to engage in a cooperation research and development project or program using the Material at some future date, a formal Cooperative Research and Development Agreement should be negotiated
- The Recipient shall keep the Provider informed of the results obtained through their use of the Material and shall provide the Provider with any manuscript which describes the work with the Material, prior to its submission for any publication and will therein acknowledge the Provider's contribution to the work published or reported. (*die einzige Klausel im Vertrag zu benefit sharing*)

Samoa – Indigene Gruppen – UC Berkeley (USA)



Auszug aus Vertrag: Monetäre Leistungen - kommerzielle Forschung an HIV-Wirkstoff

From the proceeds of all of licenses, benchmark payments, royalties, technologies and any other income that results from UC Berkeley's licensing of intellectual property arising directly from this research under the direction of Professor Jay D. Keasling at UC Berkeley or at Samoa (after first reimbursing to UC Berkeley all reasonable and necessary patent costs, legal fees, and other necessary and reasonable costs pursuant to obtaining, maintaining, and protecting the intellectual property, and provided that all UC Berkeley inventors of a given patent application agree in writing to the following revenue distribution) UC Berkeley will provide 50% of such net revenue to Seacology, a non-profit Foundation incorporated under the laws of the United States, and with offices in Berkeley, California, which shall distribute their share of the royalties as follows:

Samoa – Indigene Gruppen – UC Berkeley (USA)



Monetäre Leistungen - kommerzielle Forschung an HIV-Wirkstoff

- a. **50% to the Samoan government**
- b. **33% to Falealupo village**, paid in trust for the benefit of Falealupo village and administered by Seacology, a non-profit Foundation incorporated under the laws of the United States, and with offices in Berkeley, California;
- c. **2% to Saipipi village**, paid in trust for the benefit of Saipipi village and administered by Seacology, a non-profit Foundation incorporated under the laws of the United States, and with offices in Berkeley, California;
- d. **2% to Tafua village**; paid in trust for the benefit of Tafua village and administered by Seacology, a non-profit Foundation incorporated under the laws of the United States, and with offices in Berkeley, California;

Samoa – Indigene Gruppen – UC Berkeley (USA)



Monetäre Leistungen - kommerzielle Forschung an HIV-Wirkstoff

- e. **8% to other villages**; that will participate in this research by allowing access to genetic material in their forests, or who have begun growing commercial crops of *Homalanthus nutans* at the day of FDA approval of prostratin or its analogues as a drug, in a reasonable and equitable manner solely to be decided by Seacology, and paid in trust for the benefit of these villages and administered by Seacology ...;
- f. **2%** to the lineal descendants of Epenesa Mauigoa, late of Pesega village, being the first healer to identify for Dr. Paul Cox *Homalanthus nutans* as having potential activity against diseases of viral origin, to be paid in trust to Seacology for the health, education, and well-being of said descendants and administered by Seacology... ;

Samoa – Indigene Gruppen – UC Berkeley (USA)



Monetäre Leistungen - kommerzielle Forschung an HIV-Wirkstoff

- g. 2% to the lineal descendants of Pela Lilo, late of Falealupo village, being the second healer to identify for Dr. Paul Cox *Homalanthus nutans* as having potential activity against diseases of viral origin, to be paid in trust to Seacology for the health, education, and well-being of said descendants and administered by Seacology, ...;
- h. 0. 5% to Seacology, a non-profit Foundation incorporated under the laws of the United States, and with offices in Berkeley, California; for its good offices in coordinating payments b through g.

Samoa – Indigene Gruppen – UC Berkeley (USA)



Monetäre Leistungen - kommerzielle Forschung an HIV-Wirkstoff

Samoa and UC Berkeley intend to license their respective intellectual property rights so that prostratin (if it is approved as an anti HIV-AIDS therapy) is made available to developing nations at minimal cost. UC Berkeley shall use reasonable efforts in negotiating with any third party licensee to include terms for the distribution of the drug in developing nations at a minimal profit. In addition Professor Jay D. Keasling shall emphasize the generosity of the Samoan people, the dignity of the Samoa culture, and the contribution made to public health by the indigenous medicine practiced by Samoan healers in all presentations and publications in which the collaborative work is described. Professor Keasling will also work to see that Samoa receives the diplomatic credit it deserves in furthering the distribution of prostratin (if approved) to those developing nations hit hard by HIV/AIDS but who would be burdened by payments substantially driven by profit.

Südafrika - Council for Scientific and Industrial Research (ZA)



Gemischte Leistungen – Produktion von mückenabweisenden Kerzen

Lippia javanica project: The Minister of Water and Environmental Affairs issued a bioprospecting permit for the cultivation of *Lippia javanica*, the distillation and extraction of the oil for commercial production of mosquito repellent candles.

Beneficiaries: Amathole Community Trust

Beneficiation: The CSIR signed Benefit Sharing Agreement with the National Traditional Healers Committee (representing 8 provincial Traditional Healer Committee in South Africa namely; Gauteng, KwaZulu-Natal, Limpopo, Free State, Eastern Cape, North West and Mpumalanga. 27 local communities who are working in the factory are also benefiting from the project.

https://www.environment.gov.za/projectsprogrammes/babs_clearinghouse

Südafrika - Council for Scientific and Industrial Research (ZA)



Gemischte Leistungen – Produktion von mückenabweisenden Kerzen

The benefits outlined under the Benefit Sharing Agreement include:

Non-monetary; Monetary and “in kind” benefits:

- This is a community owned enterprise project
- 8% of the milestone income payment on all the income received from license
- To date R 46 000.00 has been paid to the National Healers Committee
- Employments of Giyani community (27 members of the Maswangani and Mabunda communities) members at Giyani Facility in the cultivation, harvest, distil oils and manufacture mosquito repellent candles
- Technology transfer

Südafrika - Parceval (PTY) LTD (ZA)



Gemischte Leistungen – Produktion von Medizinprodukten (u.a. Rohstoff für Umckaloabo)

Various indigenous biological resources: The Minister of Water and Environmental Affairs issued an integrated export and on 10 July 2013. The overall purpose of the project is to:

- Trading wild harvested materials of the listed plant species;
- Propagation and manufacturing of indigenous medicinal plants;
- Processing and manufacturing of semi-finished and finished medicinal products, and
- Marketing and retailing of finished products both locally as well as abroad.

Südafrika - Parceval (PTY) LTD (ZA)



Gemischte Leistungen – Produktion von Medizinprodukten (u.a. Rohstoff für Umckaloabo)

Beneficiaries: Workers who are involved in the cultivation and primary processing of the products.

Beneficiation

Employment and sales:

- Employment opportunities for the local community who are involved in the growing of resources, primary processing, manufacturing of semi-finished and finished products.
- Training on sustainable cultivation, harvesting, extracting and manufacturing of medicinal plants.

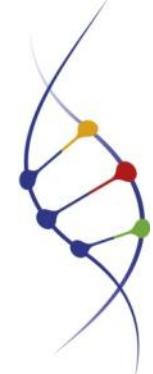
Fischereifirma BS – Chemiefirma US



Monetäre Leistungen – Produktion von Extrakt für Kosmetika

- 1. a royalty in lieu of an export tax or duty, including stamp tax, of \$x.xx per pound of resource exported
- 2. to further set aside in a trust fund to be established at an amount of \$x.xx per pound exported to be used to assist in further surveys and resource assessments, training seminars and to assist in some of the expenses of training voyages and exercises, marine conservation education and related expenses of training new fishermen to enter the industry, for scholarships and in-service training scholarships to strengthen The Bahama's future ability to monitor and manager the resource and the future harvest of other genetic material which may be of interest to XXX in the future and other similar and related bio-scientific endeavours and studies.

Fischereifirma BS – Chemiefirma US



Monetäre Leistungen – Produktion von Extrakt für Kosmetika

- 3. to set aside an additional \$x.xx per pound in the aforementioned trust funds to be used internationally by or at XXX's direction for research and expenses incurred (including its own) in the advancement of and dissemination of knowledge relating to biotechnology industries connected to The Bahamas.