Added value for nature and mankind

Equitable benefit-sharing for the conservation and sustainable use of biodiversity

BioInnovation Africa | 2019-2022

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

BIA Technical Exchange Series

Session N°3: The Missing Link: Embedding conservation and sustainable use in biotrade and bioprospecting

Date: Monday, 29/06/2020

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BIO INNOVATION AFRICA

BioInnovation Africa

-equitable benefit-sharing for the conservation of biodiversity-

Improving efficiency of national ABS frameworks	Supporting conservation & sustainable use	Biodiversity- based value chains for sustainable development	Reflecting biodiversity-based value chains in development cooperation
Sector-specific manuals to guide the ABS and permitting processes Training to support ABS contract development and support understanding on VCs and business models Online application systems to facilitate access procedures and follow-up	CNA guidelines for improving the impact of supply chains on sustainability/conservation Financing mechanisms Assistance in integrating sustainability/conservation aspects into supply chains (ABS) and corporate policies	Technical/legal support to joint ventures with African partners Supporting innovations, products and value creation based on African biodiversity for local development Technology transfer New jobs / improved jobs	Collection and analysis of lessons learned / best practices Provide advice on approaches, instruments and tools Strengthen internal capacity Possible long-term integration into the development portfolio

Time		Presenter
14:00	Welcome and introduction of the speakers / participants	Friedrich zur Heide (BIA project coordinator)
14:05	Introduction to the Session – setting the scene	Dr. Hartmut Meyer (technical advisor to BIA and team leader ABS-CBI)
	PART 1. A framework for relationships between ABS, biotrade, and conservation	
14:15	• *Overview of ABS, biotrade and conservation: preliminary findings and framework*	Rachel Wynberg (UCT) and Sarah Laird (PPI)
14:30	• *Question and Answers*	*Rachel and Sarah, all participants*
14:40	**PART 2. Country experiences: response to guiding questions:** Short inputs from focal points/country representatives in Namibia, Cameroon, Madagascar and South Africa, with Q&A following each input	*Focal points BIA countries All participants*
15:10	**PART 3. Group discussion, questions and answers**	*All participants*
15:25	**Closure and way forward, Information on next session**	Friedrich zur Heide / Anja Teschner

Golden Rules for a great webinar

- Please mute your microphones and turn off your cameras
- If you want to ask a question or have a comment, please type the words “Question” in the chat or raise your hand and you will be given the chance to express yourself later
- Click once to “Raise your hand” – click twice to “Lower your hand”
- If the moderator says your name, please un-mute your mic and ask a precise question / give comment
- Oral inputs only during Q/A after the presentations

Setting the scene

Benefit sharing principle of the CBD

Article 1. Objective

The objectives of this Convention, to be pursued in accordance with its relevant provisions, are **the conservation of biological diversity, the sustainable use of its components** and the **fair and equitable sharing of the benefits** arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.

Article 15.7 Access to Genetic Resources

Each Contracting Party shall take […] measures, […] with the aim of **sharing** in a fair and equitable way the results of research and development and the **benefits arising** from the commercial and other utilization of genetic resources with the Contracting Party providing such resources. […]

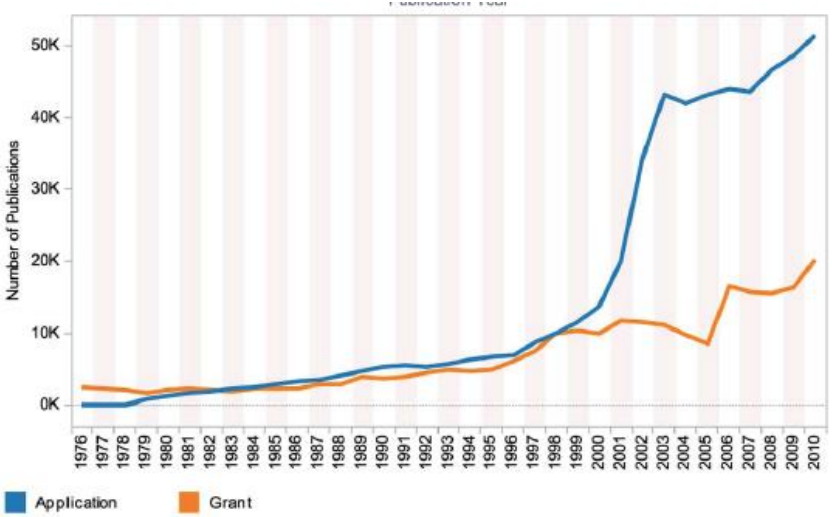
The wider context of the Nagoya Protocol

The Parties to this Protocol, …

- Recognizing that **public awareness of the economic value of ecosystems and biodiversity** and the fair and equitable sharing of this economic value with the custodians of biodiversity are key incentives for the **conservation of biological diversity and the sustainable use of its components**,
- Acknowledging the **potential role of access and benefit-sharing to contribute to the conservation and sustainable use of biological diversity**, poverty eradication and environmental sustainability and thereby contributing to achieving the Millennium Development Goals,
- Noting the interrelationship between genetic resources and traditional knowledge, their inseparable nature for indigenous peoples and local communities, the **importance of the traditional knowledge for the conservation of biological diversity and the sustainable use of its components**, and for the sustainable livelihoods of these communities,

Potential for value chains building on biodiversity from Africa

- Increasing demand for natural ingredients for cosmetics, pharmaceutical, special food products in Europe
- African exports of plant raw material for high-value production = 348 Mio. EUR in 2016 (Germany is lead importer: 15%)
- Potential of African biodiversity in Africa is rarely used to establish international value chains which implement the CBD concept of benefit-sharing
- Africa misses opportunities for direct investments into the conservation and sustainable use of biodiversity
- Need for systematic compilation of examples and concepts for ABS and its contribution to conservation and sustainable use of biodiversity



Source: Oldham P et al.. 2013. Biological diversity in the patent system. *PLOS ONE* 8(11) e78737

Patents in cosmetics

Table 4: Top plant species (Number of patent records)

Rank	Plant species	Patent Records	Rank	Plant species	Patent Records
1	*Aloe vera*	386	13	*Curcuma longa*	35
2	*Centella asiatica*	141	14	*Salivia officinalis*	31
3	*Gingko biloba*	92	15	*Emblica officinalis*	28
4	*Glycyrrhiza glabra*	61	16	*Azadirachta indica*	27
5	*Vitis vinifera*	61	17	*Citrus aurantium*	23
6	*Camellia sinensis*	59	18	*Juglans regia*	23
7	*Persea americana*	51	19	*Panax ginseng*	23
8	*Vinca minor*	49	20	*Chondrus crispus*	22
9	*Prunus persica*	48	21	*Hypericum perforatum*	22
10	*Rosmarinus officinalis*	46	22	*Morus alba*	21
11	*Rhus vernicifera*	45	23	*Sorghym caudatum*	21
12	*Serenoa repens*	38	24	*Vaccinium myrtillus*	21

Table 6: Non-North American or European plant species by distribution (Number of species)

Distribution	No	Distribution	No	Distribution	No	Distribution	No
Madagascar	54	Myanmar	13	Seychelles	7	Ghana	6
China	38	Japan	13	Algeria	7	Peru	6
Caribbean	34	Africa	12	Ethiopia	7	Philippines	6
India	23	Indonesia	12	French Guiana	7	Sri Lanka	6
Bangladesh	21	Kenya	12	Papau New Guinea	7	Colombia	6
Oceania	19	Angola	11	S. Trop. America	7	Zaire	6
Australia	17	Mauritius	10	Taiwan	7	Hainan (China)	5
Afghanistan	16	Andaman Is	10	Argentina	7	South Africa	5
Tanzania	15	Cambodia	9	Laos	7	Surinam	5
Brazil	15	Nepal	9	Mexico	6	Thailand	5
Bhutan	14	Vietnam	9	Mexico to C. America	6	Ivory Coast	5
Cameroon	13	Malaysia	8	Mozambique	6	Mauritania	4

Source: UEBT. 2010. A review of patent activity in the cosmetics sector in the context of the ethical sourcing of biodiversity. Geneva: 10 p..

A framework for relationships between ABS, biotrade, and conservation

ABS AND CONSERVATION

Rachel Wynberg and Sarah Laird

PEOPLE & PLANTS

29 June 2020

PROJECT OVERVIEW

- This project is identifying relationships between conservation and ABS, in order to support governments and others as they work to implement ABS measures and strengthen the "missing link"
- Global-level interviews with key technical experts
- About 10 national-level interviews with technical experts and other key actors in each country (South Africa, Namibia, Cameroon, Madagascar)
- Those interviewed include government, NGOs, conservation agencies, researchers
- Literature review at global and national level (eg CBD reports, published articles, national laws)
- Research is still incomplete and ongoing
- Overview video
- Products: Framework and Overview Report, including infographics; Video (August/September)
- Today's focus is to provide overview of topic, not to present results

HOW DOES ABS INTERFACE WITH CONSERVATION?

ABS is interpreted differently by different countries. Some governments (eg South Africa), include biotrade under ABS, others do not

The three objectives of the CBD address biodiversity conservation in different ways:

- Conservation of biodiversity
- Sustainable use of its components
- Fair and equitable sharing of benefits from the use of genetic resources

WHAT IS CONSERVATION?

The CBD breaks conservation down into two components:

EX-SITU CONSERVATION - the conservation of components of biological diversity outside their natural habitats

IN-SITU CONSERVATION - the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties

Connected to this is sustainable use of the components of biodiversity, defined as:

SUSTAINABLE USE means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations

(CBD, Article 2, Use of Terms)

CONSERVATION APPROACHES

LANDSCAPE AND ECOSYSTEM LEVEL – eg protected areas, integrated conservation and development approaches such as CBNRM, buffer zones, biosphere reserves

SPECIES-LEVEL – eg sustainable harvesting, changes in production practices

GENETIC LEVEL – eg gene banks, botanical gardens

INFORMATION FOR MANAGEMENT AND CONSERVATION – eg biodiversity research, taxonomy, inventories, para-taxonomy, citizen science, DNA barcoding, environmental DNA

IMPROVED MANAGEMENT CAPACITY – eg information, training, support to protected areas, governments, communities, and others

HOW DO ABS, BIODISCOVERY AND BIOTRADE INTERFACE WITH CONSERVATION?

Biodiscovery and biotrade have different relationships to conservation

Both linked to the "economic incentive" argument from which ABS grew: that sustainable use is important and biodiversity is worth saving for the economic values, and life-saving properties it holds. Over the years ABS has become more about equity and fairness, not always linked with conservation

BIOTRADE AND CONSERVATION

BIOTRADE – the commercial collection, processing and sale of products derived from biodiversity, usually for the cosmetic/personal care, food, botanical medicine and other sectors relying on the sourcing of raw materials. Biotrade often uses TK in products and marketing

Examples of links to conservation:

DIRECT - making the use of species sustainable, developing income-generating activities that depend upon biodiversity and promote conservation

INDIRECT - generating funds from royalties or up front payments to support communities and/or conservation, making value chains more equitable, compensating TK holders for their knowledge

BIODISCOVERY AND CONSERVATION

BIODISCOVERY – collection of and research on samples of biological resources in order to discover genetic information or biochemicals of value. Primarily the pharmaceutical and biotechnology sectors, but also including crop protection, food and beverage, and others. The use of "digital sequence information" – or genetic sequence data – increasingly spans all industrial and commercial sectors.

Examples of links to conservation:

DIRECT – generating research results and information important to managing and conserving biodiversity; generating funds for landscape level conservation [in particular protected areas, either land acquisition or running costs].

INDIRECT – through partnerships that include capacity building and sometimes tech transfer, strengthening domestic capacity to undertake research on domestic biodiversity.

Biodiscovery can sometimes lead to biotrade. However, raw materials in high tech sectors are more commonly produced today through synthesis or industrial fermentation

POTENTIAL DIRECT CONSERVATION BENEFITS FROM BIOTRADE AND BIODISCOVERY

- Land purchases for conservation / local stewardship
- Agroforestry / reforestation schemes
- Sustainable harvesting approaches
- Targeted interventions for threatened species, ecosystems and biomes
- Targeted approaches to reduce biodiversity loss
- Establishment of no-take zones

POTENTIAL INDIRECT CONSERVATION BENEFITS FROM BIOTRADE AND BIODISCOVERY

- Increased financing for conservation
- Enhanced capacity for conservation management
- Improved knowledge and information about biodiversity
- Strengthened collaborations that benefit conservation in source areas
- Increased support to strengthen community-based stewardship, governance and monitoring
- Strengthened and clarified land tenure and rights

MECHANISMS AND TOOLS TO SHARE BENEFITS

- Non-discretionary trust funds (eg SA Bioprospecting Trust Fund)
- Discretionary Trust Funds
- Community development funds (eg conservancy model in Namibia, Andries Steenkamp Trust Fund)
- Benefit-sharing agreements
- Contracts
- Taxes and levies
- Research collaboration agreements
- Sector-specific plans (eg rooibos, buchu, honeybush in SA; devil's claw in Namibia)
- Customary approaches
- Biocultural protocols
- Multilateral mechanisms for shared resources, knowledge, DSI

HOW DO COUNTRIES LINK ABS AND CONSERVATION?
EARLY FINDINGS (CBD REPORTS ONLY)

- **NATIONAL TRUST FUNDS** (eg Bhutan ABS Fund and Namibian Environmental Investment Fund funds aims to incentivise conservation efforts at community level)
- Included in **LAWS, POLICIES AND STRATEGIES** (eg Vietnam requires 50% to 70% of monetary benefits from the use of genetic resources to be remitted to the State for conservation and sustainable use; Madagascar gives compensation to communities for conservation; Benin strategy)
- **KNOWLEDGE SHARING** (eg Guatemala, Guyana, Malta)
- **BENEFIT-SHARING AGREEMENTS AND MOUs** (eg Benin researchers and traditional healers)
- Through **NEGOTIATION PROCESS** (eg Kenya conservation considered during PIC and MAT negotiation process)
- **MANAGEMENT PLANS** and **RESOURCE ASSESSMENTS** (eg Bhutan, South Africa)
- **BIODIVERSITY RESEARCH** (eg Cuba, Angola, Cameroon)

EARLY FINDINGS

- Laws in place typically recognise the link between conservation and ABS
- However, implementation is often a challenge
- Benefit-sharing agreements are not specific about conservation benefits
- Benefits from biotrade largely tied to sustainable use of a species
- Benefits from biodiscovery for conservation are minimal
- Many other mechanisms for conservation; what is the role of ABS?
- Conservation has a checkered history in many African countries
- Political pressure perceived to undermine conservation in some countries
- Some governments may be conflicted about linking conservation to economic development while others see the complementarity
- Community-based institutions that hold stewardship responsibilities are important vehicles for conservation
- NGOs play a critical role in bridging conservation and economic development
- Traditional authorities are key actors but suffer legitimacy challenges

"There is sustainable management of the resource in a biotrade contract but that doesn't mean biodiversity conservation. That means you just look after your one little resource and you might chop out everything else"

"A fundamental premise should be that when a value chain is being developed or scaled up, there should be a principle of knowing what the baseline of the key conservation and sustainable use parameters are"

"The biggest risk to conservation is not necessarily the harvesting of the species of focus, it's the land use practice changes that take place"

"I've never been asked to deal with conservation in a benefit-sharing agreement. You simply have to tick a box"

"A mechanism where some of the money is channelled into a fund would be so useful for us – we can simply pay it over and your duty is done"

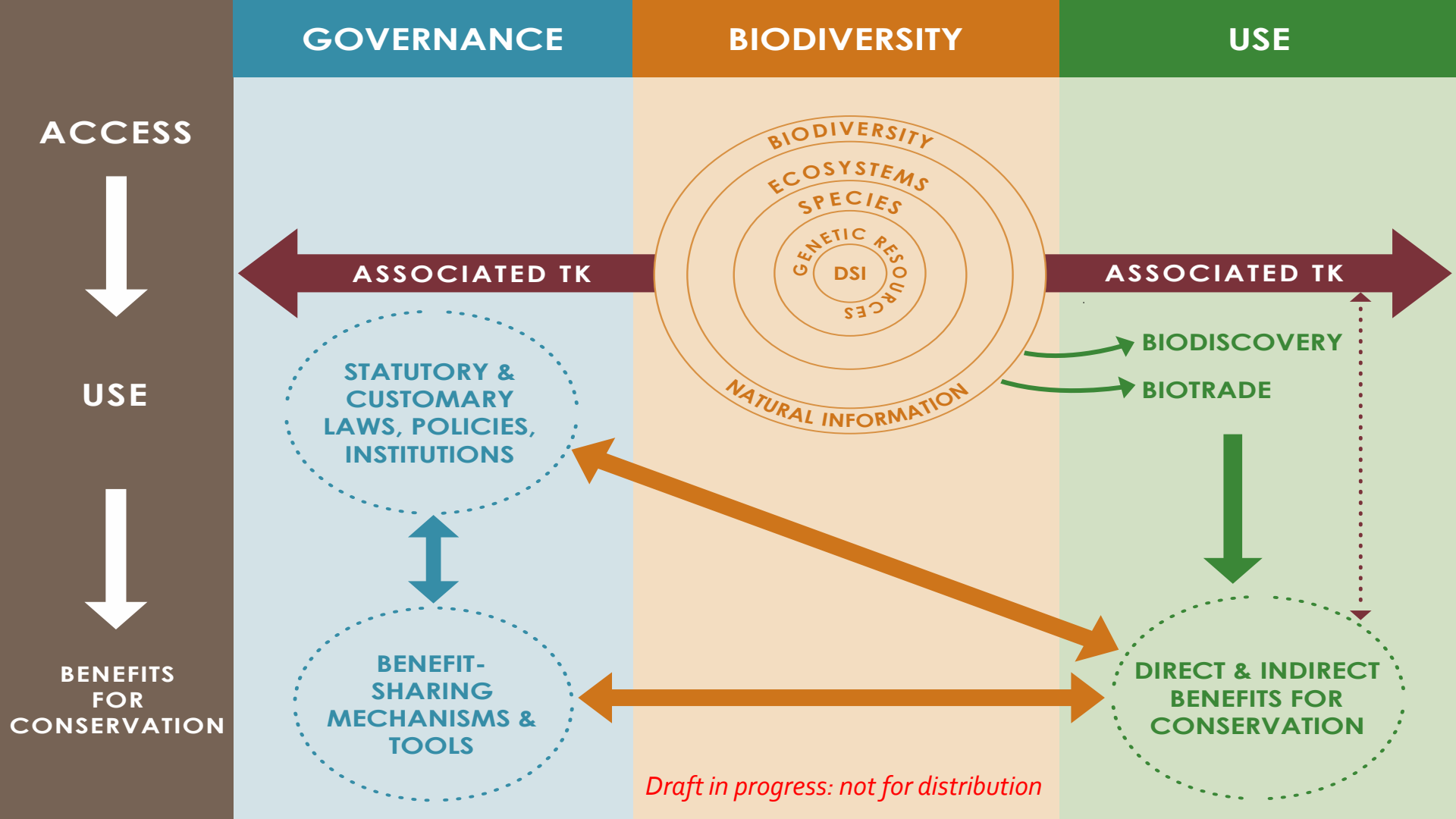
"When TK is involved 'biodiversity is tossed out of the window'"

"ABS implementation is so bureaucratic that, at the expense of commercial growth in the sector, our biodiversity has been protected from exploitation"

TRADITIONAL KNOWLEDGE AND CONSERVATION

Conservation and sustainable use often strongly embedded in practice where customary systems are still intact and where knowledge holders remain connected to biodiversity

- New, increased and/or intensified commercialisation may change these relationships
- Conservation colonial "legacy" has had negative impacts in some countries
- Use of TK will vary by sector, activity and resource
- Tendency to separate TK and the resource in ABS has led to a conservation disconnect
- DSI is increasing this
- Economic development and conservation: threat or opportunity?
- Emerging narratives of a green economy


GOVERNANCE
BIODIVERSITY
USE
ACCESS
USE
BENEFITS FOR CONSERVATION
BIODIVERSITY
ECOSYSTEMS
SPECIES
GENETIC RESOURCES
DSI
NATURAL INFORMATION
ASSOCIATED TK
ASSOCIATED TK
BIODISCOVERY
BIOTRADE
STATUTORY & CUSTOMARY LAWS, POLICIES, INSTITUTIONS
BENEFIT-SHARING MECHANISMS & TOOLS
DIRECT & INDIRECT BENEFITS FOR CONSERVATION
Draft in progress: not for distribution


THANK YOU
Any questions?

Country experiences

How do you and your colleagues broadly view the relationships between ABS, biotrade and conservation?

What conservation benefits, or challenges, have arisen in your country from ABS and from biotrade? Please provide examples of cases, partnerships, issues or mechanisms you have used.

How can linkages between ABS, biotrade, and conservation be improved in the future? What steps might be taken to strengthen conservation in your country?

Group discussion

Next webinar topics

Session : Monday, 13/07 10:00

The UNCTAD BioTrade Principles and Criteria & UEBT Ethical BioTrade Standards

- Content: Insight into the UNCTAD BioTrade Principles and the link to the UEBT Ethical BioTrade Standards
- Presenter: María Julia Oliva - Deputy Director of UEBT
- Participants: NFPs, other relevant stakeholders

Session : 25/08 or 26/08

Understanding Value Chains

- Content: Insight into the different steps of value chains, the link to ABS and locating the BIA partnerships in the value chain
- Participants: NFPs, other relevant stakeholders, private sector partners

Thank you for your participation

Implemented by:

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