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COMPREHENSIVE FRAMEWORK ON THE INTERNATIONAL LAW FOR THE CONSERVATION OF SPECIES

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ABSTRACT: This paper provides a comprehensive framework for international law that is designed to promote the conservation of species. The proposed framework emphasizes the necessity of a comprehensive approach that integrates scientific, ethical, and indigenous perspectives, as well as principles of ecological sustainability, biodiversity protection, and socio-economic considerations. It recommends improvements in international cooperation, enforcement mechanisms, and adaptive management strategies to guarantee effective implementation and compliance. Additionally, the paper investigates the function of international organizations, non-governmental organizations (NGOs), and local communities in their support and supplementation of legal measures. The objective of this framework is to fortify the current legal framework and encourage a global collaborative effort to prevent species extinction and promote biodiversity conservation by proposing a series of actionable recommendations.

Keywords: Ecological Sustainability, Biodiversity Protection, International Cooperation, Adaptive Management.

INTRODUCTION

While species-related treaties can focus on the protection of specific species in order to accomplish environmental conservation goals, specific species may also be safeguarded. Alternatively, their goal could be to create well-organized systems for utilizing species gathered in multiple nations in an environmentally appropriate manner. The numerous objectives and techniques that each of these treaties seeks to achieve will be discussed in this paper that deal with conservation and usage agreements. This is owing to the fact that each of these treaties aims to achieve distinct goals.

EARLY TREATIES

The initial effort in species preservation, the London Convention on the Conservation of Wild Fauna in Africa, formulated in 1900 but never ratified, was the pioneering instrument aimed at safeguarding species per se. The primary aim of this Convention was to avert unchecked mass killings and ensure the survival of African wild animal species that held value for humans or posed no harm. It featured a roster of species under protection, as well as a list of species requiring regulated shooting.

The Paris Convention for the Protection of Agriculturally Valuable Birds from 1902, though now surpassed, remains active. It forbids the capturing and trading of certain specified species, mainly encompassing small songbirds and owls. The use of devices causing widespread destruction or capture is also banned, and it designates harmful species whose elimination is encouraged, such as diurnal birds of prey and piscivorous birds like herons, pelicans, and divers.

The subsequent African Convention, the London Convention on the Conservation of Fauna and Flora in their Natural State, enforced between 1933 and 1968, identified a selection of species demanding strict protection (including the striking Welwitschia bainesii plant from the Namib Desert). Additionally, it outlined a group of partially protected species, subject to controlled capturing. The Convention incorporated limitations on both domestic and international trade and imposed restrictions on certain hunting methods.

Moving to the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere of 1940, its objective was to safeguard native fauna and flora in their natural surroundings across the region. However, it fell short of providing effective means for achieving this objective, particularly concerning species conservation. Unlike universally agreed-upon lists of safeguarded species, the Convention relied on individual national lists, which were not integral to the Convention itself. These lists detailed the species each participating nation intended to protect but could be altered at any time. Consequently, the Convention did not establish obligatory commitments for species protection.

REGIONAL TREATIES AND OTHER INSTRUMENTS

a. AFRICA

Regarding faunal resources, the 1968 African Convention on Nature and Natural Resources Conservation necessitates that Contracting States ensure the safeguarding, prudent utilization, and advancement of these resources, all within the context of land-use planning, economic progress, and social development. Beyond designated protected areas, Contracting States are tasked with the responsible management of exploitable wildlife populations to achieve the most sustainable output.

The convention also encompasses significant clauses related to protected species, hunting, and safeguarded regions, which largely mirror the provisions of the 1933 London Convention. The Annex of the Convention features Class A, a compilation of strictly safeguarded species, which includes three plant species. Class B comprises a list of species that can only be hunted, killed, captured, or collected with a special permit. These lists are more extensive than those outlined in the 1933 London Convention. The issuance and usage of permits, as well as the prohibition of specific hunting techniques, must be regulated by national legislation. The Convention categorically forbids any methods that might lead to the widespread destruction of wildlife.

The Convention introduces two novel and intriguing provisions. Habitats deemed crucial for the survival of species facing the threat of extinction are to be granted distinct protection. In cases where such species exist exclusively in the territory of a single Contracting State, that State bears a particular responsibility for its preservation. The Convention also addresses the trade in specimens and trophies. Parties are obligated to oversee the trade and transport of all specimens and trophies, regardless of whether they originate from protected species. Special permits are mandatory for importing, exporting, or transiting specimens and trophies from species listed in Classes A and B. However, this latter provision has diminished in importance due to the substantial number of African countries that have joined CITES as Parties.

b. AMERICA

The sole effective agreements consist of the 1940 Western Hemisphere Convention and the 1992 Convention for the Conservation of Biological Diversity and the Protection of Priority Wild Areas in Central America. The latter includes general clauses for species protection, encompassing the responsibility of each participating nation to stimulate the creation of domestic laws supporting the preservation and sustainable utilization of biological diversity elements. This also involves encouraging the formulation of strategies for species revival, instituting mechanisms to enhance oversight over unlawful trafficking of specimens from wild flora and fauna between regional countries, managing the collection of biological resources in their natural habitats, and controlling domestic trade in such resources through national regulations. Notably, the Convention does not feature an inventory of safeguarded species.

c. EUROPE

i. The Berne Convention of 1979

According to the 1979 Convention on the Conservation of European Wildlife and Natural Habitats, the Parties are obligated to provide stringent protection for plant species listed in Appendix I and animal species listed in Appendix II. This entails the prohibition of intentional actions such as picking, collecting, cutting, or uprooting of safeguarded plants, as well as the deliberate killing, capturing, and retaining of protected animals. The

Convention also forbids deliberate harm or destruction of breeding or nesting sites of animals listed in Appendix II, along with intentional disruption or destruction of their eggs. The Contracting Parties are also encouraged to restrict the possession and sale of strictly protected plants and animals.

Appendix III outlines animal species whose exploitation must be controlled to prevent their populations from becoming endangered. In Appendix IV, a compilation of hunting methods and other forms of exploitation prohibited for mammals and birds is included.

Appendix I encompasses 517 plant species, while most European mammals (excluding rodents), birds, reptiles, amphibians, certain freshwater fishes, and invertebrates are listed in Appendices II or III.

An essential aspect of the Convention stipulates that the Parties are not only responsible for safeguarding the protected species but also their habitats. The Standing Committee has decided to compile a roster of species whose habitats demand prioritized conservation efforts by the Parties, recognizing that not all species listed in the Appendices necessitate such measures. Another particularly valuable provision is the mandate to preserve endangered habitat types, discussed in Part II of this document.

ii. European Community Legislation

The initial legislative tool within the Community addressing the safeguarding of wild species was Directive 79/409, known as the Conservation of Wild Birds Directive, which was ratified on April 2, 1979. This directive will be examined in more depth in the section focusing on Sectoral Treaties below.

The Birds Directive corresponds to the Berne Convention's implementation for avian species within the Community. Similarly, the Directive on the Conservation of Natural Habitats and Wild Fauna and Flora, adopted on May 21, 1992 (92/43), performs this role for other species. Concerning additional agreements related to species, the EC is also a participant in the Bonn Convention, the Regional Seas Conventions for East Africa and the Caribbean along with their Protocols, and a few fisheries treaties, including the 1980 Convention on the Conservation of Antarctic Marine Living Resources.

On December 3, 1987, an EC Regulation was established to oversee CITES implementation within the Community. While the EC itself isn't a direct CITES Party, the convention was amended to permit "organizations of economic integration" to join. However, this amendment, endorsed in 1983, awaits ratification by several CITES Parties and remains inactive. Regardless, the 1987 Regulation was necessary to ensure uniform CITES implementation measures across Member States within the Community. A more comprehensive and updated Regulation has been formulated, yet the EC Council has not yet adopted it.

Regarding the Habitats Directive, Annex IV outlines a compilation of Animal and Plant Species of Community Interest Requiring Rigorous Protection. This includes an extensive inventory of invertebrates among other

species. While species safeguarded under the Berne Convention are encompassed in this list, birds are excluded due to their continued coverage by the Birds Directive.

The aforementioned species are safeguarded through prohibitions that closely mirror those delineated in the Berne Convention and the Birds Directive. Furthermore, the Habitats Directive introduces a mechanism for monitoring the incidental capture and killing of listed animal species. Based on the data collected, Member States are compelled to implement additional measures as needed to prevent significant adverse effects on the concerned species resulting from such incidental actions.

Member States are also under an obligation to forbid the possession, transportation, sale, or exchange of specimens collected from the wild subsequent to the Directive's implementation.

Additionally, Annex V presents a roster of Animal and Plant Species of Community Interest, which may require management measures for their capture and exploitation in the wild. This encompasses a relatively limited selection of species, including a few mammals, amphibians, freshwater fish, and a handful of invertebrates and plants.

Member States are only obligated to impose constraints on the capture of species listed in Annex V if they consider it "necessary." This contrasts with the stipulations of the Berne Convention concerning species that appear both in the Directive's Annex V and in the Convention's Appendix III, as the Berne Convention mandates restrictions for species listed in Appendix III.

It's important to acknowledge that the Directive does not impose any limitations on the import or export of the listed species. It is anticipated that the forthcoming Regulation for CITES implementation will encompass all facets of international species trade covered by the Birds and Habitats Directives.

Concerning the habitats of species, Annex II compiles a list of Animal and Plant Species of Community Interest, necessitating the identification of Special Areas of Conservation for their preservation. Within this extensive list, around 160 plant species and 22 animal species are identified as "priority species," automatically designating their habitat sites as Sites of Community Importance.

Many of the animal species listed in Annex II are also present in Annex IV, which designates specially protected species. A few appear in Annex V. However, some animal species from Annex II are exclusive to that list, signifying that they do not require prohibitions or restrictions on their capture, but mandates for safeguarding their habitats are obligatory. This mainly includes certain freshwater fish and some invertebrates.

Conversely, certain species from Appendix IV and most from Appendix V do not appear in Appendix II. Consequently, specific conservation measures for their habitats are unnecessary, but restrictions or prohibitions on capturing them are required.

Contrarily, all plant species listed in Annex II necessitating habitat conservation measures are also featured in Annex IV. Annex IV also contains species whose capture is prohibited, but without the need for specific habitat protection. Annex V plants do not necessitate specific habitat conservation measures.

In summary, the Directive's objective is to establish a unified European ecological network known as Natura 2000. This network encompasses the aforementioned Special Areas of Conservation as well as the Special Protection Areas established by Member States under the 1979 Birds Directive.

Article 19 outlines the procedure for amending the various Annexes to align with advancements in technology and science. Non-priority species and habitat types can be reclassified as priority species or habitats, and additional species or habitats can be added for the first time by the Council, subject to a qualified majority vote on a proposal from the Commission. However, any changes to Annex IV, encompassing Animal and Plant Species of Community Interest in Need of Strict Protection, must receive unanimous adoption. This provision reflects the concerns of hunters during the Directive's formulation, who were apprehensive about game species receiving full protection without the consent of their respective governments.

iii. The Alpine Convention

As introduced earlier, the 1991 Convention on the Protection of the Alps (yet to take effect) stands as an overarching treaty addressing a wide array of environmental issues in a broad manner.

A preliminary version of a Protocol focused on nature conservation has been formulated but remains un ratified. In this Protocol, there won't be an accompanying Annex containing a roster of safeguarded species. The rationale behind this decision was that the protection of species would be better facilitated through the Berne Convention, potentially through amendments to the Appendices within that Convention if required.

d. ASIA

The sole treaty addressing species conservation in Asia is the 1985 ASEAN Agreement on the Conservation of Nature and Natural Resources. This agreement mandates the Parties to afford distinct safeguarding to species that are under threat or are unique to a specific region. Moreover, it requires the preservation of areas that serve as essential habitats for species facing endangerment or those that are rare, along with species that have limited distribution areas and migratory patterns.

Furthermore, a supplementary list of endangered species warranting special attention will be established during a gathering of the Contracting Parties. This list will entail species for which capturing and trading are prohibited. A draft Schedule, formulated in 1987 and intended for presentation to the Parties, will be adopted upon the Convention's enforcement.

REGIONAL SEAS

To date, only two Regional Seas Conventions, namely those pertaining to East Africa and the Caribbean, have been accompanied by Protocols that specifically address the preservation of species.

The Protocol concerning the Conservation of Protected Areas and Wildlife was ratified in Nairobi on June 21, 1985, coinciding with the adoption of the Convention for the Safeguarding, Governance, and Enhancement of the Marine Environment and Coastal Regions in the East African zone. The Protocol pertains to all marine regions within the Indian Ocean that fall under the authority of the Parties. This encompasses their territorial waters and Exclusive Economic Zones (EEZ), along with their coastal zones and internal waters associated with the marine and coastal ecosystem (Article 1).

In a more detailed sense, the Protocol establishes measures for the safeguarding of particular plant and animal species, cataloged in four Appendices. Within Appendix I, there are merely eleven designated protected plants, several of which are exceedingly scarce and localized island-specific variants. Article 3 mandates that the Parties undertake necessary actions to secure the protection of these species. This includes prohibiting activities that might negatively impact their habitats, as well as actions like picking, collecting, cutting, uprooting, possession, or sale of these plants.

Appendix II enlists a multitude of animal species necessitating specialized protection. This list comprises ten mammals, ninety avian species, eleven reptiles, six marine mollusks, the coconut crab, various coral species, and two insect species. Notably, the bird list is directly sourced from the IUCN Red Data Book of Endangered Species. Interestingly, despite the Protocol's focus on a marine region, the number of actually listed marine species is quite limited.

Appendix III enumerates species that are eligible for exploitation but necessitate protective measures. The number of marine species on this list is quite limited: it comprises seventeen mammals like elephants and zebras, along with rock lobsters and two types of marine turtles. It's important to highlight that designating marine turtles as "exploitable" is at odds with their fully protected status under both the Algiers and Bonn Conventions, as well as their inclusion in Appendix I of CITES. This inconsistency might be due to certain Parties to the Nairobi Convention not being Parties to the Algiers or Bonn Conventions.

The exploitation of species in Appendix III must be carefully regulated to ensure that their populations are restored and maintained at optimal levels. Each Party is obliged to formulate management plans for the exploitation of these species. These plans might involve measures such as restricting indiscriminate capture and killing methods, implementing closed seasons, temporarily or locally banning exploitation, regulating possession, transportation, and sales, protecting breeding stocks and crucial habitats in designated areas, and overseeing captive exploitation.

Appendix IV pertains to a limited number of migratory species, which includes two whale species, the dugong, and five species of marine turtles found along the African coastline. The Parties are obligated to coordinate their protective efforts for these species (Article 6).

Lastly, it's important to highlight the Convention concerning the Safeguarding of Natural Resources and Environment in the South Pacific (referred to as the SPREP Convention), which was signed in Noumea on November 24, 1986. Article 14 of this Convention addresses the conservation of specially protected areas and the preservation of wild flora and fauna, potentially serving as a foundation for a Protocol. Nevertheless, as of now, no such Protocol has been ratified in relation to this Convention.

AREAS BEYOND NATIONAL JURISDICTION- THE ANTARTIC

The Adopted Measures for the Preservation of Fauna and Flora in Antarctica, established in 1964 by the Parties to the 1959 Antarctic Treaty, pertain to all mammals except whales, birds, and the entirety of Antarctic vegetation. The general principle is the protection of all species. Nevertheless, certain exemptions may be granted under specific circumstances, except for species designated as specially protected, which are listed in an Annex. Permits for hunting or capture of these species are only issued when substantiated by valid scientific grounds and without posing any risk to the natural ecosystem or the survival of the species itself. Activities that might adversely affect the normal living conditions of mammals and birds are to be minimized. Unauthorized introduction of animal or plant species into the Treaty region is prohibited.

The Treaty also establishes the authority to designate Specially Protected Areas and Areas of Exceptional Scientific Significance, detailed in Part II, Chapter I of this document.

In October 1991, a Protocol was adopted in Madrid as an extension of the Antarctic Treaty. Its aim is to create a comprehensive framework for safeguarding the Antarctic environment and its interconnected ecosystems, serving the interests of humanity as a whole. In pursuit of this goal, Antarctica is designated as a "natural reserve dedicated to peace and science." Activities within the Treaty Area must be planned and executed to prevent adverse alterations in species distribution, abundance, or productivity, as well as to safeguard endangered species or populations.

Annex II of the Protocol is specifically dedicated to the preservation of Antarctic fauna and flora. It outlines regulations for the capture of indigenous species, establishing a general principle that taking or disrupting fauna and flora is forbidden without a permit. Such permits can only be granted under exceptional circumstances and stringent conditions. The issuance of permits must be controlled to ensure the preservation of species diversity, essential habitats, and the ecological equilibrium within the Antarctic Treaty Area. Separately, specially protected species are enumerated, and permits for their capture are exclusively granted for scientific reasons.

Annex II also governs the introduction of non-native species, parasites, and diseases, stipulating that a permit is required for their introduction.

These provisions bear a strong resemblance to those delineated in the Agreed Measures. Additionally, the Protocol mandates that any activities with more than a minor or transient impact on the environment must undergo an environmental impact assessment (Article 8). Furthermore, any endeavors related to mineral resources, excluding scientific research, are forbidden. Essentially, this implies that the Treaty of Wellington concerning mineral extraction is now rendered obsolete.

SECTORAL TREATIES: MIGRATORY SPECIES

The sole sector-specific treaties addressing wildlife matters pertain either to migratory species or those spanning multiple countries. Fisheries agreements will be individually discussed in section (D) later, covering Exploitation Treaties. Similarly, agreements aimed at safeguarding other marine species like whales and seals will be treated separately.

Migration refers to the cyclic and thus predictable pattern in which certain animals engage in periodic movements between distinct geographical regions, typically involving their breeding grounds. These migratory species can be found in terrestrial, freshwater, or marine environments. Clearly, treaties play a pivotal role in protecting migratory species, as they facilitate coordinated conservation efforts along the migration paths of the species that need safeguarding.

Several of the aforementioned regional treaties include clauses related to migratory species. For example, the 1940 Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere obligates Contracting Parties to institute appropriate measures for safeguarding migratory birds of economic significance or aesthetic value, or to prevent the extinction of threatened species. Under Article 10 of the Berne Convention, the Parties commit to coordinating their endeavors to protect migratory species. The 1985 ASEAN Agreement similarly mandates cooperation for the conservation, management, and where applicable, regulation of the utilization of these species' international resources. However, these provisions remain quite broad and do not establish explicit mechanisms for collaborative efforts or joint management.

a. SPECIES OTHER THAN BIRDS

Several treaties have been established to safeguard specific species aside from birds. Concerning land-dwelling species, over the past 25 years, three international conventions have been ratified to protect the vicuna. This South American camelid, thriving in high-mountain regions, boasts the world's most exquisite and valuable wool. Due to its habitat spanning border regions, it often traverses between different countries. Notably, the vicuna is also featured in Appendix I of the CITES convention.

An agreement known as the Bilateral Agreement on the Protection of the Porcupine Caribou Herd was signed in Ottawa on July 17, 1987, between the USA and Canada. This pact was crafted to safeguard a substantial caribou herd that undertakes regular migrations between the Canadian Far North and Alaska.

Polar bears, due to their extensive time spent on pack ice, straddle the boundary between terrestrial and marine species. An Agreement on the Conservation of Polar Bears, ratified on November 15, 1973, in Oslo, has been endorsed by the five circumpolar States: Canada, Denmark (on behalf of Greenland), Norway, the USA, and the former USSR. This agreement encompasses three main objectives: facilitating coordinated research programs among the Parties, constraining the killing and capture of polar bears, and safeguarding the ecosystems in which polar bears play a role. While there are specific exceptions, capturing polar bears is generally prohibited, as is domestic and international trade involving polar bear skins. Parties are obligated to shield the ecosystems that harbor polar bears, particularly their breeding and feeding sites, in conjunction with the bears' migratory patterns. Polar bears also enjoy protection under the Berne Convention and are featured in Appendix II of CITES.

b. EARLY BIRD TREATIES

Historically, international conventions have typically centered around birds. As previously mentioned, the 1902 Convention for the Protection of Birds Beneficial to Agriculture primarily focused on safeguarding small passerines and nocturnal birds of prey. The 1950 Paris Convention introduced the principle that nearly all bird species should be protected, with only a few exceptions. Under this convention, Parties were obligated to prohibit hunting during the nesting season of birds, along with specific hunting techniques, and were encouraged to establish nature reserves.

It's noteworthy that neither of the Paris Conventions is exclusively concerned with migratory birds. However, it's uncertain whether these conventions would have been established if migration wasn't a significant concern. Despite being technically in effect, these conventions were ratified by only a limited number of countries. Furthermore, they have essentially been surpassed in practical terms. They lack mechanisms for collaborative cooperation and management, resulting in their limited effectiveness.

c. THE EC BIRDS DIRECTIVE

The EC Directive 79/409, enacted on April 2, 1979, concerning the Conservation of Wild Birds, is binding on all Member States. The primary objective of this directive is to sustain the populations of all bird species within the EC at levels aligned with ecological, scientific, and cultural needs. To achieve this aim, the directive mandates Member States to establish a comprehensive protective framework for all bird species, explicitly forbidding actions like intentional killing, capture, or disruption, as well as the deliberate harm or destruction of nests and eggs, the collection or removal of eggs and nests, the possession of eggs, and the possession or

trade of living or deceased birds, along with identifiable parts or derivatives. There are limited exceptions for specific game species detailed in a provided list, and a set of prohibited hunting techniques is outlined.

Moreover, Member States are obligated to designate Special Protection Areas to safeguard the habitats of all species listed in Annex I, a substantial number of which are migratory, in addition to the habitats of all migratory species, regardless of whether they are listed in the annex or not.

d. BILATERAL TREATIES

In practical terms, the aforementioned instruments find actual application primarily within Europe, although their legal scope extends more broadly. Outside of Europe, various bilateral agreements have been established for the conservation of migratory birds.

The earliest of these agreements dates back to 1916, between the United States and Great Britain (representing Canada before its independence). Similarly, in 1936, the United States and Mexico entered into a comparable treaty, with a supplementary Protocol signed in 1972.

Notable bilateral treaties on this subject emerged in the 1970s and 1980s. These include agreements between the United States and Japan (1972), Japan and the former USSR (1976), China and Japan (1981), India and the former USSR (1984), and Australia and China (1986). From this list, it's evident that migratory birds beyond Europe have limited international legal protection, primarily in the North American, Pacific, and to some extent, Asian regions.

These bilateral treaties share several common characteristics. Generally, they prohibit the capturing of species listed in an appendix, unless the respective Party designates an open hunting season. This discretion regarding harvestable species is thus left to each Party. Typically, hunting of game birds is permissible, except during breeding seasons. Parties are often encouraged to establish reserves for migratory birds. Additionally, there are provisions regulating the introduction of non-native species.

However, these bilateral treaties don't encompass the entire spectrum of species or the complete span of migration routes for the species in question. They lack mechanisms for cooperative implementation or coordination between conventions addressing the same species within the same geographical area. These treaties fall short of substituting a global convention designed to comprehensively address conservation challenges for migratory species worldwide.

e. THE GLOBAL TRADE ON MIGRATORY SPECIES: THE BONN CONVENTION OF 1979

The Convention on the Conservation of Migratory Species of Wild Animals was adopted on June 23, 1979, in Bonn, Germany.

KEY OBLIGATIONS

The main responsibilities of the Convention include safeguarding endangered species listed in Appendix I (Article III) and striving to establish agreements for the protection and management of migratory species that are in unfavorable conservation status or stand to significantly benefit from international cooperation (such species are listed in Annex II). As a species may often fall into both endangered and cooperation-beneficial categories, the Convention appropriately permits the listing of a migratory species in both Appendix I and II if circumstances warrant (Article IV-2).

SPECIES COVERAGE

The Convention defines migratory species as those cyclically crossing jurisdictional boundaries. This definition encompasses marine species migrating between adjacent Exclusive Economic Zones (EEZs) or between a coastal State's jurisdiction and high seas. In the latter case, States exploiting migratory species on high seas are regarded as Range States for those species. Notably, this definition excludes species exclusive to high seas.

Currently, Appendix I contains 51 highly endangered species. This list includes 18 mammals, such as whales, the monk seal, various antelopes, and the mountain gorilla; 24 birds; 8 reptiles, including 6 of the 7 marine turtle species; and one fish. Appendix I doesn't aim to catalog all endangered migratory species, but rather to represent the most at-risk ones. The list can be updated by the Conference of the Parties as new scientific data emerge. The first conference in 1985 added eleven species to the list, including four marine turtle species.

In contrast, Appendix II encompasses numerous species, including nearly a quarter of all existing bird species (around 2,000 species). It includes entire bird families like geese, ducks, wading birds, and passerines. Some mammals, like certain seal populations and small cetaceans, the African elephant, the dugong, and marine turtles, are also listed, along with other species. Appendix II has been amended twice to incorporate European bat populations, small cetaceans, some seal populations, and most crane species.

Both appendices list species that migrate locally across borders and have precarious conservation statuses. For instance, Appendix I includes the mountain gorilla found on the Rwanda-Zaire border, Grevy's zebra along the Ethiopia-Kenya border, and the Barbary stag on the Algeria-Tunisia border.

Amendments and Obligations Amendments to both appendices can be adopted by a two-thirds majority of present and voting Parties. Such amendments come into force after ninety days and apply to all Parties without reservations (Article IX–4–6).

For Appendix I species, Parties must prohibit their capture, even if listed in Appendix II and covered by agreements under the Convention. Exceptions may be made for scientific purposes or traditional subsistence hunting, provided they are well-defined, limited in time and space, and do not endanger the species (Article III-

5). Parties must also strive to conserve and restore habitats, remove obstacles impeding migration, and address factors endangering these species (Article III–4).

Regarding Appendix II species, Parties are obligated to aim for the conclusion of Agreements. Annex V provides comprehensive guidance on Agreement content, including periodic conservation status reviews, coordinated conservation plans, habitat restoration, control of exotic species, maintenance of suitable habitats along migration routes, pollution prevention, and ecologically grounded management of species harvesting.

Evaluation of the Convention's Current State Although progress is gradual, efforts are underway to enhance the application of the Bonn Convention. While major countries for migratory birds remain outside the Convention, its number of Parties is increasing, as are resources and scientific involvement. However, Parties convene only every three years, and there's a two-tier system for negotiating, signing, and ratifying Agreements. While flexible, this system can cause delays. Some Agreements have been finalized, particularly where a significant number of Range States are Convention Parties.

f. THE NORTH AMERICAN SYSTEM

An instance of a functional informal arrangement can be observed in North America, where an unofficial understanding between the Canadian and American governmental departments overseeing fauna has significantly contributed to the preservation of ducks and geese.

The North American Waterfowl Management Plan, established in 1985, encompasses 37 species, mainly pursued as game. This arrangement sets a framework for long-term planning and establishes goals for restoring bird populations. This is primarily achieved through safeguarding, rehabilitating, and managing their habitats. The Treaties of 1916 and 1936, concluded between the United States and Canada on one side and Mexico on the other for migratory bird protection, provide the legal foundation for this agreement.

In 1988, the Plan extended to Mexico through a "Memorandum of Understanding" among the wildlife management agencies of the three nations. This Memorandum aims to develop and execute a comprehensive conservation strategy for migratory birds and their habitats, in accordance with the 1916 and 1936 treaties. A tripartite Commission is planned to formulate this strategy and any needed coordinated management plans.

In the United States, the North American Wetlands Conservation Act was enacted in 1989 specifically to implement this tripartite agreement. This legislation empowers the federal US Government to fund conservation projects in Canada and Mexico. Funding is generated through taxes on hunting equipment and ammunition sales within the US, along with a budget allocation sanctioned by Congress. Notably, 50% to 70% of available funds must be allocated to financing projects in Canada and Mexico based on the birds' priorities.

The North American system succeeds due to the presence of the two conventions on migratory birds, the collaborative relations among relevant governmental departments—especially between Canada and the United States—and the political determination to counter the decline in certain duck and geese populations.

One potential reason Canada and the United States haven't ratified the Bonn Convention is that they possess an existing legal framework to safeguard migratory birds. Nonetheless, while the current system is adequate for ducks and geese that typically winter only as far as Mexico, it inadequately addresses the numerous other bird species migrating much farther south.

Coordinating necessary conservation actions is simpler among three nations compared to the Western Palaearctic region, involving multiple countries. An agreement similar to the North American approach seems crucial for Western Palaearctic waterbirds. Given the societal and economic significance of waterfowl hunting in most European countries, it seems reasonable for hunters in these countries to contribute to the preservation of these species' habitats in countries where the birds winter, as US hunters presently do.

Such an agreement might face difficulties without a resource transfer from northern to southern countries to conserve these birds' habitats. This financial resource transfer could also prove relevant to many Agreements under the Bonn Convention in the future, whether centered on conservation or species exploitation. Although currently not a widely adopted practice, if the Conference of the Parties recognized the principle of international co-financing as a prerequisite for Agreement preparation, it could potentially lead to a substantial increase in Convention Parties.

THE CONVENTION ON BIOLOGICAL DIVERSITY

It is important to emphasize that within the Convention on Biological Diversity, only a limited number of provisions are dedicated to the protection of individual species. This reflects the Convention's strong emphasis on ecosystem conservation as part of a comprehensive approach to safeguarding biodiversity on a global scale. Notably, the Convention does not include a specific roster of species earmarked for protection. However, the possibility remains open for the future adoption of Protocols or Annexes that might enumerate protected species, subject to the agreement and necessity of the Parties involved.

Apart from the overarching requirement to maintain sustainable populations of species within their natural habitats, the Convention establishes the following obligations related to species protection:

- Identification and monitoring of species considered key components of biological diversity.

An illustrative collection of categories of species with potential significance is outlined in Annex I. These species could be given priority attention for conservation efforts. The categories comprise species facing threats, wild relatives of cultivated or domesticated species, species with economic, medicinal, or agricultural importance, species of cultural, scientific, or social value, and species contributing to research into biodiversity

conservation and sustainable utilization, such as indicator species. However, this list may not offer precise guidance, as many species could fulfill at least one of these criteria or be seen as potentially satisfying them.

- Development or maintenance of appropriate legislation for safeguarding threatened species and populations. This is the primary substantive obligation concerning the protection of such species.
- Establishment of measures for ex situ conservation of biological diversity components, preferably within their countries of origin. This duty is intended to complement the in situ conservation measures mentioned earlier.
- Inclusion of general provisions for the sustainable utilization of harvested species. In particular, Parties should "implement measures related to the utilization of biological resources to prevent or minimize detrimental effects on biological diversity."

This provision has a broad scope, addressing concerns such as the excessive exploitation of target species, the impact of target species harvesting on non-target species and the overall ecosystem, as well as the challenge of unintentional catch.

It's noteworthy that this provision could serve as the global legal basis for the prohibition of large drift nets.

Other sections of the Convention, like those covering access to genetic resources, have been discussed in section (D)(5)(b) of the Introduction. The shift toward non-free access should motivate biodiversity conservation, especially considering that a fair portion of benefits derived from genetic resource utilization must now be shared with the providing country.

THE TECHNIQUE OF SPECIES CONSERVATION TREATIES

The majority of treaties addressing species protection impose obligations on the participating countries regarding the methods of protection. Species are usually categorized and listed in separate appendices, with each legal category (such as "fully protected" or "partly protected") assigned to a specific species.

As the need for protection of various species continues to grow, there is a potential issue of the lists of species within appendices becoming increasingly lengthy and intricate. To mitigate this, a technique known as the 'negative' or 'inverted' list is becoming more prevalent. This approach involves listing an entire group of plants or animals as protected, with specific exceptions named for species that are permissible to hunt or eliminate.

Conservation conventions frequently include detailed regulations for species protection, particularly concerning prohibited methods of capture and the terms and conditions for allowable capture. Each appendix can encompass different levels of restrictions on taking and trading: complete bans on taking might apply to species in one appendix, while species in another appendix could face limited hunting, fishing, or collection through

controlled measures. The Berne Convention and EC Directives have distinct Appendices outlining forbidden methods of taking.

Amendments to appendices are typically facilitated through simplified procedures. This mechanism is essential for the practical efficacy of a convention. The traditional ratification process would be time-consuming, but with the simplified procedure, listing a species as "protected" can be urgently addressed, without necessitating formal ratification. This approach often relies on tacit consent. Once the amendment is adopted by the Parties through a specified majority (usually a qualified two-thirds majority) at a regular meeting, Parties have a set period, usually three to six months, to voice objections or make reservations. The terminology varies, but the principles remain the same across conventions.

Once this period elapses, the amendment becomes effective for all Parties, binding them. This includes Parties that were absent or voted against the amendment. The only exception is for Parties that formally lodged objections or reservations during the designated timeframe. Notably, CITES permits amendments to appendices through postal voting, allowing swift action in emergencies without waiting for the next Conference of the Parties, which could be years away.

Conservation conventions generally grant countries the freedom to implement measures stricter than those they have committed to applying. This provision prevents more advanced conservation States from being compelled to align with less advanced ones. In such cases, the convention is a set of minimum rules that all Parties must adhere to, rather than a maximum set of rules that cannot be exceeded.

Interestingly, this provision exists in the EC Birds Directive and the EC Regulation implementing CITES. In other areas, the fundamental aim of the Community is usually to harmonize national legislations.

THE IMPLEMENTATION OF SPECIES CONSERVATION TREATIES

Nature conservation treaties function as legal frameworks, differing from contract-based treaties like trade agreements that involve reciprocal obligations. Contract treaties allow for sanctions through the withdrawal of concessions, whereas law-based treaties lack such mechanisms. In conservation conventions, when one Party permits harm to a protected species, other Parties cannot respond in kind.

Conventions focused on biological diversity conservation, similar to treaties addressing human rights, are hard to enforce without effective retaliatory measures within the treaty. Attempting retaliation through alternative means raises complex issues and might even be legally questionable, especially under the GATT.

For instance, the US imposed tuna import restrictions on Mexico to prevent dolphin bycatch. Mexico challenged this as an impermissible trade barrier through GATT, and the GATT Panel upheld Mexico's stance. To enable trade restrictions for conservation, GATT regulations might need adjustment. However, CITES hasn't faced this challenge with GATT so far.

Although CITES lacks provisions for retaliation, it has indirectly pressured non-compliant Parties by urging others not to accept imports from non-compliant countries. Enforcement remains tough as conservation conventions involve unilateral commitments with non-compliance causing minimal harm to other Parties. Since most Parties breach these conventions, they are cautious about pressuring others for compliance.

Lack of inspection systems, which would infringe on national sovereignty, exacerbates the situation. Inspection provisions exist mainly for marine treaties like the Whaling Convention, fishing conventions, and agreements related to marine living resources. Establishing effective conservation conventions may require bodies with powers to oversee implementation. This often involves a Conference of the Parties or a Standing Committee that reviews convention application, amends appendices, and provides recommendations.

Some recent conventions permit representatives of NGOs like conservation organizations as observers in Conferences of the Parties. This fosters transparency, as breaches become public knowledge through debates. Nations are less likely to tarnish their reputation when public scrutiny is a factor.

Measures to enhance convention application, including governing bodies, Secretariats, and budgets, are more prominent in recent and effective conventions. Those lacking these mechanisms are often dormant and less effective, such as the 1940 Convention of Nature Protection and Wildlife Preservation in the Western Hemisphere and the 1968 African Convention on Conservation of Nature and Natural Resources.

Secretariats are often established by existing organizations, streamlining administration and saving resources. Notably, UNESCO, IUCN, Council of Europe, and UNEP serve as Secretariats for major conservation conventions.

Consequently, conservation conventions often operate with limited funding and staff, as Parties typically prefer minimal budget contributions.

EXPLOITATION TREATIES

Exploitation treaties have distinct goals compared to conservation treaties and have consequently not developed to the same extent over time.

The aim of exploitation treaties is to conserve the foundation of economic activities rather than biological diversity. When such activities involve shared resources, treaties are crucial to establish joint regulatory measures for effective implementation. Without these measures, preventing the excessive depletion of the specific resource becomes impractical.

Several exploitation treaties address fishing in bordering waters or international rivers, but the majority pertain to sea fisheries. Previously, sea fisheries treaties were essential before the expansion of Exclusive Economic

Zones (EEZs) to 200 miles. However, their significance has diminished since then. Notably, treaties remain essential for species harvested in the high seas, such as tuna and whales.

Enforcement of fisheries treaties is typically managed by a Commission, often established as an independent international organization with its Secretariat funded by the treaty Parties. Contrarily, these Secretariats are not usually provided by existing international organizations.

Such Commissions wield substantial authority. They can enact regulatory measures that gain binding status for Parties after a stipulated period during which Parties can raise objections or reservations. This process mirrors the one employed for amending lists of species in conservation conventions, albeit applied to the full range of regulatory measures within the Commission's mandate.

The nature of these regulatory measures can vary across agreements. They commonly encompass delineating closed areas and seasons, imposing gear restrictions, and setting catch limits, including full protection for specific species. Notably, habitat protection measures are rarely included.

Certain treaties also incorporate inspection protocols or provisions for independent observers on fishing vessels. Examples include the Whaling Convention and the Convention on the Conservation of Antarctic Marine Living Resources, which will be explored further.

THE INTERNATIONAL CONVENTION FOR THE REGULATION OF WHALING

The Washington Agreement, also known as the International Convention for the Regulation of Whaling, was signed on December 2, 1946. It pertains to "all regions where whaling occurs," encompassing waters within national jurisdictions, including territorial seas and internal waters. The Convention lacks a specific definition of whales. However, the Parties' interpretation has predominantly limited its scope to encompass baleen and sperm whales, as well as a few other species, thus excluding most smaller cetaceans.

The Convention's primary goals are centered around "ensuring the effective preservation of whale populations, enabling the organized growth of the whaling industry."

However, in earlier periods, the Commission established quotas that proved overly generous, leading to its failure in preventing the near-extinction of many species. Consequently, it was compelled to progressively grant full protection to these species, one after another, a series of actions that ultimately led to the downfall of the very whaling industry the treaty was intended to foster.

As a consequence, the International Whaling Convention has undergone a gradual transformation from being primarily a treaty for commercial exploitation to becoming more focused on conservation efforts.

An unconventional aspect for an exploitation treaty is the provision that the Convention is open to all nations, not just those engaged in whaling. This inclusion seems to have been deliberately incorporated, as the Preamble

asserts the signatories' acknowledgment of "the world's interest in preserving the substantial natural assets represented by whale stocks."

Due to the depletion of these stocks and the growing global concern for the plight of the majestic whales, numerous non-whaling nations, including landlocked countries such as Switzerland, joined as Parties. This shift in membership altered the dynamics within the Commission. The requirement for a three-quarters majority in the Commission to enact regulatory measures quickly evolved into a pro-conservation majority.

This shift in composition empowered non-whaling nations to exert their influence on the minority of nations that continued their whaling practices. These whaling nations had the option to raise objections to Commission decisions, allowing them to remain unbound by such resolutions. However, this strategy often had the unintended effect of negatively impacting the public perception of these objecting states, as their objections gained wide publicity.

Iceland has recently withdrawn from the treaty, thereby freeing itself from its associated obligations, and other nations might follow suit in the future.

THE CONVENTION ON THE CONSERVATION OF ANTARCTIC MARINE LIVING RESOURCES (CCAMLR)

The CCAMLR treaty, signed in Canberra on May 20, 1980, is exclusively available to nations that have an interest in either research or harvesting activities related to the marine living resources covered by the Convention. These resources encompass all living organisms located to the south of the Antarctic Convergence, except for whales and seals, as these species are subject to the Whaling and Antarctic Seals Conventions, respectively.

The Commission established by the Convention holds significant authority. It is empowered to identify protected species, determine permissible harvest quantities for any species, establish time frames and areas for fishing (open and closed seasons), and regulate fishing methods. These measures align with the standard practices found in fisheries conventions, as discussed earlier. Additionally, the Commission is authorized to implement other conservation measures it deems necessary to achieve the Convention's objectives. These measures might address the impacts of harvesting and associated activities on various components of the marine ecosystem beyond the harvested populations.

Distinctively among fisheries treaties, the Convention outlines general conservation principles that must guide any harvesting and related activities within the Convention's coverage area (Article II(3)). These principles encompass:

- Preventing the reduction of harvested population sizes below levels that ensure stable recruitment.

- Maintaining ecological relationships among harvested, dependent, and interconnected populations of Antarctic marine resources.
- Preventing or minimizing the risk of changes in the marine ecosystem that cannot be potentially reversed within two to three decades.

The overarching goal is to enable the sustainable conservation of these resources. Consequently, CCAMLR stands as the sole fisheries treaty explicitly designed to function as an ecological treaty as well. It goes beyond being a mere commercial exploitation treaty, marking a significant milestone in this realm.

Regrettably, decisions made by the Commission necessitate consensus, which can hinder the formulation of well-founded, conservation-oriented decisions.

INCIDENTAL TAKING BY LARGE DRIFT NETS

Recent advancements in technology have enabled the creation of exceptionally lengthy drift nets, reaching up to 50 to 60 kilometers in size. These nets inadvertently capture substantial quantities of unintended species, including marine birds and cetaceans.

Existing international legal frameworks lack provisions to prohibit the use of these extensive drift nets on the high seas, where the principle of fishing freedom continues to apply. However, the combination of widespread public opposition and concerns about the significant over-exploitation of specific marine resources due to this fishing technique has yielded some outcomes. Many countries have enacted domestic laws to forbid their nationals from utilizing large drift nets within their Exclusive Economic Zones (EEZ).

However, the challenge persists in high seas areas, particularly in the Pacific Ocean. In the North Pacific region, a resolution has been achieved through a trilateral agreement among Canada, Japan, and the United States, along with bilateral agreements between the United States and Korea, as well as the United States and Taiwan.

In the South Pacific, a Convention signed in Wellington on November 24, 1989, mandates its member nations to prohibit the deployment of drift nets longer than 2.5 kilometers within their jurisdictional waters. Parties to this Convention also possess the authority to ban the landing, processing, and importation of fish caught using drift nets, as well as the possession of such nets on fishing vessels operating in these areas. Nonetheless, concerns have emerged regarding the compatibility of these stipulations with the United Nations Convention on the Law of the Sea and the General Agreement on Tariffs and Trade (GATT).

For the high seas, which couldn't be addressed by these specific agreements, certain countries decided to bring the issue to the United Nations General Assembly—an unconventional step for a technical matter. The endeavor proved successful. After extensive negotiations, a Resolution was eventually adopted through consensus on December 15, 1989 (Res.44(225)) based on a compromise. This Resolution advocates a moratorium on the utilization of extensive drift nets in the high seas starting from July 1, 1991. It's important to note that the

prohibition may be exempted or revoked within a particular region if effective conservation and management measures are undertaken, supported by a joint statistical analysis conducted by relevant international stakeholders with fishing interests in that area.

Although not legally binding like a treaty, the Resolution has been embraced by most countries whose fishing fleets employ large drift nets. Nonetheless, a U.N. General Assembly Resolution carries substantial moral influence, which has proven effective in this instance. In contrast, negotiating, signing, and ratifying a treaty would have taken several years. This innovative approach to addressing shared natural resource challenges establishes a valuable precedent, allowing for consensus to be achieved in the political realm, especially when swift resolution is imperative.

CONVENTIONS FOR THE REGULATION OF SEALING

Due to the fact that most seal species inhabit coastal regions, only a limited selection of species receive the benefits of international safeguarding measures. A few migratory seal species are granted protection through four specific conventions.

Regarding the Atlantic Ocean, both the 1957 Agreement on Measures to Regulate Sealing and to Protect Seal Stocks in the Northeastern Part of the Atlantic Ocean and the 1971 Agreement on Sealing and the Conservation of Seal Stocks in the Northwest Atlantic have seen a decline in significance with the expansion of national jurisdiction boundaries to 200 nautical miles. In the Pacific Ocean, the Interim Convention on the Conservation of North Pacific Fur Seals was established in 1957 and renewed periodically until 1984, but it has now lapsed.

Within the Antarctic realm, the signatories to the 1959 Antarctic Treaty enacted the Convention for the Conservation of Antarctic Seals in London in 1972. The primary aims of this convention are safeguarding, scientific investigation, and sustainable utilization of all seal species present in the region, while maintaining an ecologically balanced system.

Several other seal species and their breeding habitats are also safeguarded through both regional and worldwide conservation agreements, including CITES, the Berne and Bonn.

RIGHTS AND RESPONSIBILITIES OF STATES FOR THE CONSERVATION OF SPECIES

1. The Foundations and Definition of Responsibility

The acceptance of responsibility by a nation through a treaty can pertain to other nations, to the Range States of specific species like migratory species, or even to future generations. Such responsibility invariably holds an international dimension. The underlying principles for this responsibility are laid out in the preambles of agreements, which outline the general values of wildlife and plants that warrant conservation efforts. These encompass not only practical values but also scientific, cultural, recreational, and economic ones.

In a handful of instances, like the Berne Convention and the Biological Diversity Convention, the inherent value of wildlife and flora has been explicitly recognized. This acknowledgment of intrinsic value can be understood as a formal endorsement by countries of the right of species to exist independently of their utility to humanity.

Acknowledging responsibility under a treaty naturally involves some degree of limitation on sovereign rights. However, instruments rarely explicitly refer to responsibility or define its extent. More often, this responsibility needs to be inferred from the values of species outlined in the preamble and from the substantive obligations articulated in the convention's articles.

Nevertheless, certain conventions, mainly concerning migratory species, do employ the term "responsibility." For example, Article 2.6 of the Ramsar Convention discusses the migratory nature of waterfowl and the international responsibilities associated with their conservation. The Preamble of the 1973 Agreement on the Conservation of Polar Bears acknowledges the unique obligations and interests of Arctic Region nations regarding the protection of Arctic fauna and flora. The EC Birds Directive emphasizes the shared responsibility in addressing the conservation of migratory bird species, which presents a cross-border environmental challenge.

Regarding marine species, the Preamble to the 1980 Convention on the Conservation of Antarctic Marine Living Resources recognizes the principal responsibilities of Antarctic Treaty Consultative Parties for safeguarding the Antarctic environment and, in particular, their obligations under Article IX of the Antarctic Treaty concerning the preservation of living resources in Antarctica.

In all these instances, the implicit restriction of sovereignty linked with the recognition of responsibility stems from the fact that other nations along migratory routes also exercise sovereign rights over the same species.

This concept of international responsibility can be extended to species that are shared among multiple countries. The sovereignty of each Range State is inherently constrained because the actions or inactions of any single Range State can impact the survival of the species for other Range States. This shared right arises from their individual sovereignties.

However, this line of reasoning doesn't hold for endemic species, as no other individual nation possesses a legal stake in their survival. The only potential international interest lies in the broader global community's concern to prevent the extinction of such species.

This interest, which constitutes the shared concern of humanity for species survival, is progressively gaining formal acknowledgment. This is evident from the fact that at least three treaties currently delineate distinct responsibilities for safeguarding endemic species.

The 1968 African Convention on the Conservation of Nature and Natural Resources stipulates that when animal and plant species face the threat of extinction and are "restricted to the territory of only one Contracting State, that State assumes a particular responsibility for their protection" (Article VIII).

In 1979, the Berne Convention mandates that Parties should give special attention to species at risk, particularly those that are endemic (Article 3). The ASEAN Agreement similarly compels Contracting Parties to acknowledge their unique duty concerning species exclusive to their jurisdiction.

Lastly, the Preamble of the Convention on Biological Diversity asserts that countries hold the responsibility for conserving their biological diversity and utilizing their biological resources sustainably. This signifies that the responsibility for all species, including endemics, has now obtained recognition within a global treaty framework, notwithstanding the principle of national sovereignty.

2. Problems of Developing an International Status for Species

While the acceptance of responsibility is one aspect, the acknowledgement of a distinct international status for species is an entirely different matter. Presently, the acceptance of responsibility is understood as a voluntary restriction on national sovereignty, emerging on a case-by-case basis through freely negotiated treaties. In contrast, recognizing an international status for species could imply that future treaties no longer treat the limitation of sovereignty as voluntary. Instead, this constraint would be mandated for all nations by the global community.

As a result, even recognizing migratory species as shared resources has posed significant challenges, as this step was perceived to directly infringe upon national sovereignty.

Nonetheless, certain treaties and other instruments have now embraced the concept of shared resources, although their usage of the term varies considerably. For instance, in the preamble of the Ramsar Convention, the Parties acknowledge that "waterfowl in their seasonal migrations may transcend frontiers and therefore should be viewed as an international resource."

The EC Birds Directive asserts that migratory species represent a "common heritage." The Bonn Convention initially included the notion of "common resources" in early drafts, but this term was ultimately eliminated from the text due to negotiators' disagreements.

It's worth noting that the examples above are predominantly focused on migratory species. Concerning species in general, the most far-reaching text is the International Undertaking on Plant Genetic Resources, adopted by the FAO Conference in November 1983. This document proclaims that it "is based on universally accepted principles that plant genetic resources are a legacy of humanity and should, therefore, be accessible without restrictions."

The document further stipulates that "adequate legislative and other measures will be maintained and, when necessary, developed and adopted to safeguard and conserve the plant genetic resources of plants within their natural habitat in key centers of genetic diversity."

However, this text is merely a resolution of the FAO Conference and does not carry legal binding. Nevertheless, it holds great significance as it uniquely combines the recognition of genetic resources as humanity's legacy with provisions for unfettered access and the obligation to preserve. The Undertaking, of course, pertains solely to plants.

The newly established Convention on Biological Diversity leans more towards the side of national sovereignty. It only states that biological diversity is the "common concern of humanity," and the proposal to employ the term "common heritage" was categorically rejected.

3. Performance Obligations arising from State Responsibility

Even in cases where treaties don't explicitly articulate this, it's understood that assuming responsibility entails the obligation to take actions aimed at preventing species extinction or maintaining their populations at favorable conservation levels. These fundamental requirements are present in the majority of conservation conventions.

An early instance is the 1940 Washington Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere. Although the treaty text itself lacks a substantive obligation, the Preamble articulates a clear policy statement: "The Governments of the American Republics, desiring to protect and preserve in their natural surroundings representatives of all species and genera of their indigenous flora and fauna, including migratory birds, in adequate numbers and over areas extensive enough to ensure their survival from extinction due to any causes within the control of man."

A more recent example, the ASEAN Agreement, asserts: "Contracting Parties shall, as far as possible, ensure the survival and promote the conservation of all species under their jurisdiction or control, with a view to maintaining maximum genetic diversity."

Interestingly, despite a 45-year gap between these two conventions, there is minimal disparity between their respective texts.

Performance obligations are crucial not just because they logically stem from a state's acknowledgment of responsibility—whether explicitly stated or implied—but also because they provide a solid legal foundation for devising practical conservation measures. This aspect of concrete conservation methods is where earlier and more recent conservation conventions diverge notably.

This progression in international conservation law is also evident in how treaties increasingly address both conservation and exploitation matters. The transformation of the International Whaling Convention from primarily a commercial exploitation treaty into a conservation treaty has been mentioned earlier. More recently, the Convention on Biological Diversity combines provisions for safeguarding biological diversity with strategies for the sustainable utilization of its elements. "Sustainable use" is defined by the Convention as: "The use of components of biological diversity in a manner and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to satisfy the needs and aspirations of present and future generations."

This definition, coupled with the substantial provisions of the Convention, places a clear performance obligation on Parties to ensure that measures governing the use of wild species and natural habitats are devised to avert such a decline in biological diversity.

4. The Special Case of Migratory Species

The principles of sovereignty typically apply to both stationary and migratory species, unless a treaty indicates otherwise. Migratory species, therefore, fall under the successive sovereignty of all the states along their migration path. Consequently, effective conservation of migratory species necessitates the establishment of treaties to ensure international collaboration among Range States.

The preservation of migratory species can pose specific challenges, particularly when some countries within the migratory range enforce conservation measures, often at significant expense, while others allow unsustainable exploitation of these species or the destruction of crucial habitats. This challenge is most pronounced in the case of anadromous species – those that breed in inland waters but spend their adult lives in the high seas beyond national jurisdiction.

Until recently, international maritime law allowed these species to be harvested in the high seas without restrictions, unless specific treaties dictated otherwise. Any such treaty, in any case, would have only applied to its signatory nations. This left non-signatory nations free to engage in various forms of exploitation. As a result, conflicts emerged, especially concerning species like salmon in the North Atlantic and North Pacific. Countries of origin strongly objected to uncontrolled high-sea fishing of these species. These conflicts were eventually resolved through agreements, but the principle of fishing freedom remained intact. Fisheries resources ceased to be considered national once they ventured beyond national jurisdiction.

However, this principle was discarded in the 1982 Law of the Sea Convention. According to this convention: "States in whose waters anadromous stocks originate shall have the primary interest in and responsibility for such stocks".

As a result, fishing of Anadromous species in the high seas is prohibited for all states, including those where the stocks originate. These species can now only be fished within Exclusive Economic Zones (EEZs). The Law of the Sea Convention extends these rules to catadromous species as well – species that undergo the opposite migration pattern, like eels. They breed in the high seas but spend their adult lives in inland waters.

5. The Rights of States over Species

Until recently, sovereignty primarily pertained to individual organisms and plants, not interfering with the right to utilize genetic resources for scientific research or commercial purposes. Such resources were viewed as products of nature, not subject to ownership or patents, with only genetic processes derived from them eligible for patents. States could regulate the collection of specimens within their territory or impose levies on such collections. Some countries even banned the export of specific resources – for instance, Brazil prohibited the export of rubber tree seeds. However, once an illegal export happened, the exporting State lacked the authority to claim rights over the resource beyond its borders.

This approach essentially considered genetic processes as a shared heritage in the absence of clear regulations on the matter. Furthermore, users of these processes faced no obligations. In practice, collected material was often stored in gene banks in other countries, making it inaccessible to countries of origin. Substantial profits could be generated from products derived from such material, with little to no compensation to the countries where the material originated.

An alternative system was proposed in the IUCN's draft convention on biological diversity before the negotiations on the new Convention on Biological Diversity. This system would have provided access to genetic resources, possibly not free of charge, and users would have had to pay fees, particularly for commercial use. These fees could have funded conservation efforts where needed.

However, the negotiators of the Convention chose to emphasize state sovereignty over genetic resources within their territory. This effectively establishes national sovereignty over species, distinguishing it from individual organisms and plants within the species.

As detailed in the Introduction, Article 15 of the Convention on Biological Diversity governs access to genetic resources, subject to the consent of the concerned state. "Results of research and development, and benefits from the commercial and other use of genetic resources" must be shared equitably with the providing Contracting Party.

In essence, the Convention asserts that states hold rights over the species residing within their borders. They can deny access to other countries for genetic resources. While this right existed previously, its explicit inclusion in the new Convention overshadows the non-binding FAO International Undertaking on Plant Genetic Resources.

The Convention validates states' right to demand payment for commercial use of genetic resources from their territory. This is an extension of recognizing that countries of origin hold rights over genes and processes derived from such material, especially for commercial use.

Though seemingly equitable, formalizing such rights could lead to practical challenges, especially for species present in multiple countries. Questions arise, like whether payments should only go to the providing country as per the Convention or to other countries where the same resource exists in its natural habitat. Issues related to determining the origin country during disputes among Range States, the status of introduced species, and recourse for smuggled genetic material also emerge.

The Convention does not comprehensively address these issues, leading to potential disputes over resource rights and evidence-related difficulties. Article 27 of the Convention does outline a dispute settlement mechanism, but many of these questions remain unanswered.

CONCLUSION:

In summary, the creation of an all-encompassing global legal structure for the preservation of species is an urgent need as well as a difficult task. The present study has illustrated that although extant legal frameworks like the CBD, CITES, and the Ramsar Convention offer crucial frameworks for safeguarding biodiversity, they necessitate substantial improvement in order to adequately tackle modern conservation issues.

In order to promote a comprehensive and flexible approach, the suggested framework emphasizes the significance of combining ecological sustainability, biodiversity protection, and socioeconomic factors. The effectiveness of the framework depends on bolstering international cooperation, fortifying enforcement measures, and integrating indigenous, ethical, and scientific viewpoints. Furthermore, in order to supplement and support legal measures, the active involvement of non-governmental organizations, local communities, and international organizations is essential. This framework seeks to close loopholes in the current legal system and advance a coordinated international endeavor to stop the extinction of species and guarantee the survival of biodiversity for future generations. It does this by offering a number of practical recommendations. The way forward requires cooperation from all parties involved in order to put these suggestions into practice, adjust to changing conservation requirements, and promote a sustainable coexistence between human activity and the environment. By doing this, we can perhaps ensure that future generations will live on a healthy and biodiverse Earth.

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