Improving collaboration in the implementation of global biodiversity conventions

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Abstract: *Eight conventions make up the biodiversity cluster of multilateral environmental agreements (MEAs) that provide the critical international legal framework for the conservation and sustainable use of nature. However, concerns about the rate of implementation of the conventions at the national level have triggered discussions about the effectiveness of these MEAs in halting the loss of biodiversity. Two main concerns have emerged: lack of capacity and resources and lack of coherence in implementing multiple conventions. We focused on the latter and considered the mechanisms by which international conventions are translated into national policy. Specifically, we examined how the Strategic Plan for Biodiversity 2011–2020 and the associated Aichi Biodiversity Targets have functioned as a unifying grand plan for biodiversity conservation. This strategic plan has been used to coordinate and align targets to promote and enable more effective implementation across all biodiversity-related conventions. Results of a survey of 139 key stakeholders from 88 countries suggests streamlining across ministries and agencies, improved coordination mechanisms with all relevant stakeholders, and better knowledge sharing between conventions could improve cooperation among biodiversity-related conventions. The roadmap for improving synergies among conventions agreed to at the 13th Convention on Biological Diversity's Conference of Parties in 2016 includes actions such as mechanisms to avoid duplication in national reporting and monitoring on conventions and capacity building related to information and knowledge sharing. We suggest the scientific community can actively engage and contribute to the policy process by establishing a science-policy platform to address knowledge gaps; improving data gathering, reporting, and monitoring; developing indicators that adequately support implementation of national plans and strategies; and providing evidence-based recommendations to policy makers. The latter will be particularly important as 2020 approaches and work to develop a new biodiversity agenda for the next decade is beginning.*

Keywords: Aichi Targets, Convention on Biological Diversity, multilateral environmental agreements, national biodiversity strategies, national biodiversity action plan, politics, policy, strategic plan for biodiversity

Mejora en la Colaboración en la Implementación de las Convenciones Mundiales sobre la Biodiversidad

Resumen: *Ocho convenciones son las que forman la agrupación multilateral de acuerdos ambientales (MEAs, en inglés), los cuales proporcionan el marco de trabajo legal importante para la conservación y el uso sustentable de la naturaleza. Sin embargo, la preocupación por la tasa de implementación de estas convenciones a nivel nacional ha disparado discusiones sobre la efectividad de estas MEAs para detener la pérdida de la biodiversidad. Han surgido dos preocupaciones principales: la falta de capacidad y recursos y la falta de coherencia en la implementación de múltiples convenciones. Nos enfocamos en la segunda y*

consideramos los mecanismos mediante los cuales las convenciones internacionales se transforman en reglamentos y políticas nacionales. En específico, examinamos cómo el Plan Estratégico para la Biodiversidad 2011 – 2020 y los Objetivos de Biodiversidad de Aichi asociados han funcionado como un gran plan unificador para la conservación de la biodiversidad. Este plan estratégico se ha usado para coordinar y alinear los objetivos para promover y habilitar una implementación más efectiva a lo largo de todas las convenciones relacionadas con la biodiversidad. Los resultados de una encuesta entre 139 accionistas clave de 88 países sugieren la optimización en los ministerios y en las agencias, una coordinación mejorada de los mecanismos entre todos los accionistas relevantes, y una mejor partición del conocimiento entre las convenciones podría aumentar la cooperación entre las convenciones relacionadas con la biodiversidad. La hoja de ruta para mejorar las sinergias entre las convenciones, acordada en la Conferencia de Participantes de la 13ra Convención sobre la Diversidad Biológica en 2016, incluye acciones como los mecanismos para evitar la duplicación de reportes y monitoreos nacionales sobre las convenciones y la capacidad de construcción relacionada con la partición de la información y el conocimiento. Sugerimos que la comunidad científica pueda participar activamente y contribuir al proceso de políticas al establecer una plataforma política-científica que resuelva los vacíos en el conocimiento; mejore la recolección, reporte y monitoreo de datos, desarrolle indicadores que respalden adecuadamente a la implementación de planes y estrategias nacionales; y proporcione recomendaciones basadas en evidencia para los políticos. La última acción será de particular importancia conforme se aproxima el 2020 y se inicie la labor por desarrollar una nueva agenda de biodiversidad para la siguiente década.

Palabras Clave: acuerdos ambientales multilaterales, Convención sobre la Diversidad Biológica, estrategias nacionales para la biodiversidad, Objetivos de Aichi, plan de acción nacional para la biodiversidad, plan estratégico para la biodiversidad, políticas, reglamento

摘要: 八项多边环境协定中关于生物多样性的公约为自然的保护和可持续利用提供了重要的国际法律框架。然而, 对这些公约在国家层面执行情况的担忧已经引发了关于多边环境协定能否有效阻止生物多样性丧失的讨论。其中主要存在两个问题: 能力和资源的不足, 以及多项公约的执行缺乏连贯性。我们重点关注后者, 并分析了国际公约向国家政策转化的机制。具体来说, 我们研究了《2011-2020 年生物多样性战略规划》及相应的爱知生物多样性目标是如何作为一个整体统一的生物多样性保护计划发挥作用的。这一战略规划被用于协调和统一各项目标, 以促进和实现所有与生物多样性相关的公约更有效的实施。对来自 88 个国家 139 个主要利益相关者的调查表明, 要提高生物多样性相关的公约之间的合作, 需要精简各部委和机构, 改进利益相关者之间的协调机制, 并推动公约之间更好的知识共享。2016 年《生物多样性公约》第十三次缔约国会议商定的加强公约间协作的路线图中, 包括了避免重复对公约进行国家报告工作和监督检查的机制、发展信息与知识共享能力等行动。我们建议, 科学界可以通过建立科学–政策平台来弥补知识空缺; 加强数据的收集、报告和监督; 制定充分支持国家规划和战略实施的指标; 为决策者提供基于证据的建议等途径来积极参与并促进政策过程。随着 2020 年的临近, 为下一个十年制定新的生物多样性议程的工作也已经开始, 这一点将尤为重要。**[翻译: 胡怡思; 审校: 聂永刚]**

关键词: 爱知目标, 生物多样性公约, 多边环境协议, 国际生物多样性战略, 国际生物多样性行动计划, 政治, 政策, 生物多样性战略规划

Introduction

As a response to alarming and continuing biodiversity loss, climate change, and more specific issues, such as halting the depletion of the ozone layer, governments have collectively adopted a growing number of multilateral environmental agreements (MEAs) (Mitchell 2006–2016). All the world's countries are party to 1 or more of the agreements, and these MEAs, therefore, represent a globally coordinated approach to engaging countries in international decision making and action.

Although the reasons for the plethora of MEAs can be found in the history of the emerging international environmental policy agenda since the 1960s, the recognition of the associated challenges, often termed as fragmentation of international environmental law, triggered calls for mechanisms to achieve coherent implementation of MEAs to improve effectiveness and efficiency.

Steps to enhance cooperation and coordination among MEAs have mainly focused on thematic clusters of conventions (von Moltke 2001). This includes the cluster of 8 biodiversity-related conventions, that cooperate at the secretariat level through the Liaison Group of Biodiversity-Related Conventions (von Moltke 2001; Convention on Biological Diversity 2018a): the Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (2016); Convention on the Conservation of Migratory Species of Wild Animals (CMS); Ramsar Convention on Wetlands (Ramsar); Convention Concerning the Protection of the World Cultural and Natural Heritage; International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA); International Plant

Table 1. Overview of the 8 biodiversity-related conventions and their strategic plans.[a]

	CBD	CITES	CMS	Ramsar	WHC	ITPGRFA	IPPC	IWC
Objectives	conservation of biological diversity, sustainable use of its components and sharing of benefits	ensuring no species is subject to unsustainable exploitation because of international trade	conservation of terrestrial, marine, and avian migratory species throughout their ranges	ensuring conservation and wise use of wetlands	preservation of cultural and natural heritage sites of outstanding universal value	conservation and sustainable use of plant genetic resources for food and agriculture and sharing of benefits	protection of world's cultivated and natural plant resources from plant pests	conserve whales and manage whaling
Adoption	1992	1973	1979	1971	1972	2001	1951	1946
Year of entry into force	1993	1975	1983	1975	1975	2004	1952	1948
Website	https://www.cbd.int/	https://cites.org/	http://www.cms.int/	http://www.ramsar.org/	http://whc.unesco.org/en/convention/	http://www.planttreaty.org/	https://www.ippc.int	https://iwc.int/home
Number of parties	196	183	126	169	193	144	183	87
Current strategic planning document	Strategic Plan for Biodiversity	CITES Strategic Vision	Strategic Plan for Migratory Species	Ramsar Strategic Plan	Strategic Action Plan and Vision	no current strategic planning document[b]	IPPC Strategic Framework	–
Time frame	2011–2020	2008–2020	2015–2023	2016–2024	2012–2022	–	2012–2019	–
Formal adoption	Decision X/2	Resolution 14.2	Resolution 11.2	Resolution XII.2	Resolution 18 GA 11	–	adopted in March 2012	–
Inclusion of strategic objectives/ goals/ targets	4 goals and 20 Aichi Biodiversity Targets	3 goals and 16 objectives	5 goals and 16 objectives	4 goals and 16 targets	6 goals	–	4 strategic objectives and organizational results	–
Mapping of targets against Aichi targets	not applicable	notification to the Parties No. 2015/032; Annex 3	Annex A of the Strategic Plan	Annex II of the Strategic Plan	none	–	none	–

[a]Abbreviations: CBD, Convention on Biological Diversity; CITES, Convention on International Trade in Endangered Species of Wild Fauna and Flora; CMS, Convention on the Conservation of Migratory Species of Wild Animals; Ramsar, Ramsar Convention on Wetlands; WHC, Convention concerning the Protection of the World Cultural and Natural Heritage; ITPGRFA, International Treaty for Plant Genetic Resources for Food and Agriculture; IPPC, International Plant Protection Convention; IWC, International Whaling Commission established by the International Convention for the Regulation of Whaling.

[b]In October 2015 the governing body (GB) of ITPGRFA agreed to review the implementation of the Strategic Plan for Implementation of the Benefit-sharing Fund of the Funding Strategy 2009–2013 and update it, to include development of a funding target for the Benefit-Sharing Fund for the 2018–2023 period (Resolution 2/2015) (IT/GB-6/15/Res 2). In resolution 13/2015 (IT/GB-6/15/Res 13), the GB requests the secretary to develop with inputs from parties a multi-year program of work for 2018–2025 for consideration at the next session of the GB and a document outlining expected outcomes, outputs, and milestones for the implementation of the treaty in the 2016–2017 biennium.

Protection Convention (IPPC), and International Convention for the Regulation of Whaling which established the International Whaling Commission (IWC) (Table 1). With the exception of the CBD, which is aimed at conservation and sustainable use of biodiversity and the fair and equitable sharing of benefits arising out of the utilization of genetic resources, the conventions are issue based and address the preservation and use of a particular natural resource (e.g., wetlands in the case of Ramsar and natural heritage in the case of WHC) or use of a natural resource in a particular context (e.g., species in trade in the case of CITES). As such, they are part of the so-called first generation of MEAs (UN Environment Programme 2007).

The biodiversity-related conventions provide a critical international legal framework for the conservation and sustainable use of nature that needs to be translated into policies and laws at the national scale, and by some regional bodies (e.g., the European Union), to have effect at the national (or regional) level. Ideally, they are also taken into account in working practices of companies and the work programs of nongovernmental organizations (NGOs). Importantly, this international legal framework not only consists of the convention texts, but is also shaped by the adoption of decisions at the regular meetings of the convention governing bodies.

Concerns about the rate of implementation of the conventions have triggered discussions about the role of MEAs in halting the loss of biodiversity (e.g., Jóhannsdóttir et al. 2010; Di Marco et al. 2016). Two main concerns have emerged. First, many countries lack the resources, capacity and adequate legal instruments to respond to environmental obligations. Second, numerous convention-specific targets and lack of streamlining across the conventions may obscure a clear path toward the overall societal goal of halting the loss of biodiversity (Di Marco et al. 2016). Streamlining in this context refers to the coordinated efforts to align targets and deliverables of the individual conventions to improve efficiency and avoid duplication of efforts. These concerns have led to a broad recognition of the need for enhanced cooperation in the implementation of the conventions at both national and international levels (UNEP World Conservation Monitoring Centre 2012; UN Environment Programme 2014).

We considered the mechanisms by which international conventions are translated into national policy and thus eventually action. We then examined how the Strategic Plan for Biodiversity 2011–2020 and the associated Aichi Biodiversity Targets (Convention on Biological Diversity 2010a) have been used as a mechanism to coordinate work across the biodiversity-related conventions. We analyzed the current challenges of coordinated implementation as recognized by national focal points (NFPs) and relevant authorities to biodiversity-related conventions. Finally, we examined current international processes to streamline national implementation of MEAs and considered how they provide opportunities for science to inform and engage in global and national biodiversity planning processes. This relates to the implementation of the Strategic Plan for Biodiversity 2011–2020 and to the development and implementation of a post-2020 global biodiversity framework.

Strategic Planning in MEA Implementation

Starting with the Ramsar Convention's Strategic Plan 1997–2002 (Ramsar Convention on Wetlands 1996), strategic plans have not only been a key instrument for most of the biodiversity-related conventions, but over time also evolved into vehicles for enhanced collaboration among the conventions. All conventions' strategic plans aim to provide direction and guidance for implementation at national and international levels, through the adoption of convention-specific objectives, targets, and indicators of progress (Hagerman & Pelai 2016). The first strategic plan designed with the recognition that it went beyond the interest of the respective convention, was the strategic plan adopted by parties to the CBD in 2002 (Convention on Biological Diversity 2002). The 2002 CBD Strategic Plan and its 2010 Biodiversity Target became key planning instruments for the conservation and sustainable use of biodiversity globally through recognition of the target by the World Summit on Sustainable Development (Convention on Biological Diversity 2002; Walpole et al. 2009), and its subsequent incorporation within the Millennium Development Goals.

Regrettably, the 2010 target was not achieved (Butchart et al. 2010; Convention on Biological Diversity 2010b). However, the lessons learned were instrumental for the subsequent Strategic Plan for Biodiversity 2011–2020, adopted in 2010, including the 20 Aichi Biodiversity Targets (Campbell et al. 2014; Convention on Biological Diversity 2010c). Besides being acknowledged by the UN General Assembly as the global plan for biodiversity (UN General Assembly 2010), this plan was also the first to be recognized or supported by 5 other biodiversity-related conventions (UN Environment Programme 2015). Further, to support the implementation of the Strategic Plan, CITES, CMS, and the Ramsar Convention mapped their strategic goals and targets against the Aichi Biodiversity Targets (Table 2 & Supporting Information) (Convention on Migratory Species 2014; Ramsar Convention on Wetlands 2015a, 2015b). This created the opportunity for further cross-convention implementation at the national level, and facilitated information sharing and reporting. In addition, UNEP-WCMC has carried out a mapping of the articles and decisions of 7 of the biodiversity-related conventions against the Aichi Biodiversity Targets in an effort to show how they each contribute to the achievement of the targets (UNEP World Conservation Monitoring Centre 2015).

Table 2. The 20 Aichi Biodiversity Targets of the Strategic Plan for Biodiversity 2011–2020 relative to the strategic plans of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora 2016), CMS (Convention on Migratory Species 2014) and Ramsar (Ramsar Convention on Wetlands 2015).*

Strategic Plan for Biodiversity 2011–2020	CITES (objectives)	CMS (targets)	Ramsar (targets)
Target 1: awareness of biodiversity	**1.4**: indentification of conservation needs of species; **1.8**: capacity building; **2.2**: Sufficient resources; **3.2**: awareness of CITES; **3.3**: enhanced cooperation; **3.4**: contribution to Millennium Development Goals and Sustainable Development Goals	**1**: awareness of migratory species, their habitats and migratory systems	**11**: demonstration, documentation and dissemination of benefits; **16**: capacity development and education; **19**: capacity building for the strategic plan
Target 2: biodiversity integrated into development and poverty reduction strategies and accounting and reporting systems	**1.1**: compliance with CITES; **1.5**: Best available scientific information; **3.1** cooperation with international financial mechanisms; **3.3**: see Aichi Target 1; **3.4**: see Aichi Target 1; **3.5**: cooperation with international organizations	**2**: integrated of values into development and poverty reduction strategies and accounting and reporting systems	**1**: integration of benefits into policy strategies relating to key sectors; **11**: see Aichi Target 1
Target 3: elimination of harmful incentives and application of positive incentives	**1.1**: see Aichi target 2; **1.2**: transparent administrative procedures; **2.2**: see Aichi Target 1; **3.3**: see Aichi Target 1; **3.4** see Aichi Target 1	**4**: elevation of harmful incentives and application of positive incentives	**3**: good practices for the wise use of water and wetlands
Target 4: sustainable production and consumption	**1.1**: see Aichi Target 2; **1.5**: see Aichi Target 2; **1.6**: managing shared wildlife resources; **1.7**: reducing illegal wildlife trade; **3.2**: see Aichi Target 1; **3.3**: see Aichi Target 1; **3.4**: see Aichi Target 1; **3.5**: see Aichi Target 2	**5**: sustainable production and consumption	**3**: see Aichi target 3; **9**: resource management within a river basin or along a coastal zone
Target 5: habitat loss, degradation and fragmentation	**1.5**: see Aichi Target 2; **1.6**: see Aichi Target 4; **1.7** see Aichi Target 4; **3.4**: see Aichi Target 1; **3.5**: see Aichi Target 2	**10**: key habitats and sites for migratory species identified and protected	**Goal 1**: addressing the drivers of wetland and degradation; **7**: addressing threats to sites at risk of losing their ecological character
Target 6: sustainable management of fish and invertebrate stocks and aquatic plants	**1.1**: see Aichi Target 2; **1.4**: see Aichi Target 1; **1.5** see Aichi Target 2; **1.6**: see Aichi Target 4; **1.7**: see Aichi Target 4; **3.4**: see Aichi Target 1; **3.5**: see Aichi Target 2	**6**: avoidance of adverse impacts of fisheries and hunting	**5**: effective planning and integrated management; **9**: see Aichi Target 4; **13**: Sustainability of key sectors contributing to biodiversity conservation and human livelihoods

Continued

Table 2. Continued

Strategic Plan for Biodiversity 2011–2020	CITES (objectives)	CMS (targets)	Ramsar (targets)
Target 7: sustainable agriculture, aquaculture, and forestry	**1.5**: see Aichi Target 2; **1.6**: see Aichi Target 4; **1.7**: see Aichi Target 4; **3.4**: see Aichi Target 1; **3.5**: see Aichi Target 2	**5**: see Aichi Target 4	**2**: water use respects wetland ecosystem needs; **3**: see Aichi Target 3; **7**: see Aichi Target 5; **9**: see Aichi Target 4; **13** see Aichi Target 6
Target 8: pollution and eutrophication	no equivalent objective	**7**: reduction of anthropogenic pressures to levels that are not detrimental	**2**: see Aichi Target 7; **3**: see Aichi Target 3
Target 9: invasive alien species and pathways	**1.1**: see Aichi Target 2; **1.3**: implementation is consistent with decisions adopted by the Conference of the Parties; **1.5**: see Aichi Target 2; **1.7**: see Aichi Target 4; **3.3**: see Aichi Target 1	**7**: see Aichi Target 8	**Target 4**: invasive alien species and pathways
Target 10: anthropogenic pressures on coral reefs and other vulnerable ecosystems impacted by climate change or ocean acidification	**1.1**: see Aichi Target 2; **1.4**: see Aichi Target 1; **1.5**: see Aichi Target 2; **1.6**: see Aichi Target 4; **1.7**: see Aichi Target 4; **3.4**: see Aichi Target 1; **3.5**: see Aichi Target 2	**7**: see Aichi Target 8	**6**: increase in area, numbers, and ecological connectivity in particular underrepresented types of wetlands
Target 11: effectively and equitably managed, ecologically representative and well-connected protected areas and other effective area-based conservation measures	**1.4**: see Aichi Target 1; **3.5**: see Aichi Target 2	**10**: see Aichi Target 5	**Goal 2**: effectively conserving and managing the Ramsar Site network; **5**: see Aichi Target 6; **6**: see Aichi Target 10; **7**: see Aichi Target 5
Target 12: prevention of extinctions and improved conservation status of threatened species	**1.1**: see Aichi Target 2; **1.4**: see Aichi Target 1; **1.5**: see Aichi Target 2; **1.6**: see Aichi Target 4; **1.7**: see Aichi Target 4; **1.8**: see Aichi Target 1; **2.2**: see Aichi Target 1; **2.3**: Sufficient resources for capacity building; **3.2**: see Aichi Target 1; **3.3**: see Aichi Target 1; **3.4**: see Aichi Target 2	**8**: improvement of the conservation status of threatened migratory species.	**5**: see Aichi Target 6; **7**: see Aichi Target 5; **8**: National Wetland Inventories
Target 13: maintaining genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives	no equivalent objective	**12**: safeguarding the genetic diversity of wild populations of migratory species.	**11**: see Aichi Target 1

Table 2. Continued

Strategic Plan for Biodiversity 2011–2020	CITES (objectives)	CMS (targets)	Ramsar (targets)
Target 14: safeguarding and restoration of ecosystems services	**1.3**: see Aichi Target 9; **1.5**: see Aichi Target 2; **3.3**: see Aichi Target 1; **3.4**: see Aichi Target 1 **Objective 3.5** see Aichi Target 2	11: maintaining and restoration of migratory species and their habitats which provide important ecosystem services	**8**: see Aichi Target 12; **11**: see Aichi Target 1; **12**: restoration of degraded wetlands.
Target 15: enhancing ecosystem resilience and carbon stocks through conservation and restoration	No equivalent objective	11: see Aichi Target 14	**12**: see Aichi Target 14
Target 16: Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits	**Objective 1.1** see Aichi Target 2	no equivalent target	no equivalent target
Target 17: National Biodiversity Strategy and Action Plans (NBSAPs)	**Objective 3.4** see Aichi Target 1	13: inclusion of priorities related to migratory species and migratory systems in NBSAPs	**19** see Aichi Target 1
Target 18: traditional knowledge, innovations and practices of indigenous and local communities	**1.1**: see Aichi Target 2; **1.3**: see Aichi Target 9; **1.5**: see Aichi Target 2; **3.2**; see Aichi Target 1; **3.4** see Aichi Target 1	14: traditional knowledge, innovations and practices of indigenous and local communities	**8** see Aichi Target 12; **10**: traditional knowledge, innovations and practices of indigenous and local communities; **16**: see Aichi Target 1
Target 19: improving knowledge, the science base and technologies	**1.4**: see Aichi Target 1; **1.5**: see Aichi Target 2; **1.6**: see Aichi Target 4; **1.8**: see Aichi Target 1; **2.2**: see Aichi Target 1; **2.3**: see Aichi Target 12; **3.3**: see Aichi Target 1; **3.4**: see Aichi Target 1; **3.5**: see Aichi Target 2	15: improved science base, information, awareness, understanding and technologies	**8**: see Aichi Target 12; **14**: scientific and technical guidance
Target 20: mobilization of financial resources	**2.1**: sufficient financial resources; **2.2**: see Aichi Target 1; **2.3**: see Aichi Target 12; **3.1**: see Aichi Target 2	16: mobilization of adequate resources	**17**: financial and other resources for implementation

The text has been modified for length. The full text is directly sourced from the individual convention's strategic plans and can be found in Supporting Information. Where objectives and targets from CITES, CMS, or the Ramsar Convention apply to multiple Aichi Biodiversity Targets, text is only provided for the first match.

Implementing the Strategic Plan for Biodiversity 2011–2020 at the National Level

Implementation of the Strategic Plan for Biodiversity 2011–2020 at the national level is principally through national biodiversity strategies and action plans (NBSAPs)—the key mechanism for the implementation of the CBD and called for by article 6 of the convention (Herkenrath 2002; Adenle et al. 2015). This was reinforced by the adoption of Aichi Biodiversity Target 17, which stipulates that "by 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan." Recognizing the important role of NBSAPs as a basis for cooperation, the CBD and other conventions invited parties to involve NFPs of all relevant conventions (i.e., individuals or entities within countries linking national government to convention bodies) in both revising and implementing their country's NBSAP post 2010 (Convention on Biological Diversity 2010c; UN Environment Programme 2015).

Role of the Strategic Plan for Biodiversity 2011–2020 in Enhancing National Coordination

Despite being the most widely endorsed conservation plan ever developed and adopted by governments, the extent to which the Strategic Plan for Biodiversity 2011–2020 and the most recent generation of NBSAPs have helped countries to coordinate implementation of the biodiversity-related conventions to deliver impact, has been scarcely studied. To help address this, a questionnaire-based survey was conducted by UNEP-WCMC in 2014 to assess progress and challenges in implementing the biodiversity-related conventions. This survey targeted the aforementioned NFPs, along with other key stakeholders, and elicited 139 responses from 88 countries. (For details see UN Environment Programme [2014] and UN Environment Programme [2015].)

Sixty percent of the respondents indicated that the Strategic Plan for Biodiversity 2011–2020 or the NBSAP revision process had been used to promote and enable more effective implementation across all biodiversity-related conventions in their respective countries. In addition, over half of the NFPs (54%) stated that collaboration amongst focal points from different conventions played a positive role in implementing the biodiversity-related conventions. In particular, respondents highlighted the advantages of a common framework to guide development and implementation of new activities, initiatives, and measures (reported by 81%) and the enhanced implementation of the conventions (reported by 59%).

The results of the 2014 UNEP survey also showed that a variety of coordination mechanisms is already in place in countries. Over 70% of NFPs who responded to the survey reported that coordination mechanisms are in place to facilitate cooperation among NFPs. For example Norway established in 2005 a Conventions Team as a formal coordination body consisting of the NFPs from CMS, Ramsar Convention, CITES, CBD, IPBES, and WHC. Meetings are held regularly about 3–5 times per year and the team aims to integrate the international conventions into the strategic agenda of the Norwegian Environmental Agency. Its terms of reference give it a mandate to develop effective interfaces between conventions and agreements, promote synergy, and avoid duplication. A different approach has been adopted in Palau with the Conservation Consortium as an informal group comprised of representatives from government agencies and civil society, including traditional leaders. The consortium supplements the work of formally established national committees such as the Palau National Resources Council. Although originally only comprised of people working in the area of conservation, the Consortium has become multidisciplinary, open to members from other sectors such as energy, infrastructure, and business. Initially, the consortium's purpose was information sharing between people conducting various environmental projects within Palau, but over time its remit has expanded, including adopting the role of a forum for NFPs of the biodiversity-related conventions.

Despite the overall positive attitude from NFP toward the role of the Strategic Plan for Biodiversity 2011–2020 as a streamlining mechanism, 80% of survey respondents suggested there were opportunities to further improve cooperation in implementing the biodiversity-related conventions. Challenges impeding progress included the following: location of NFPs for different conventions in different government ministries and agencies, which reduces collaboration; lack of cooperation mechanisms among NFPs and other key stakeholders involved in the implementation of the conventions linked to regulatory barriers or weak collaboration among state agencies; general lack of knowledge of how to implement the Strategic Plan for Biodiversity and NBSAPs; and insufficient resources for NFPs to fully address all their responsibilities. Respondents recognized that there are limits to the degree that conventions can collaborate on all issues, given the different mandates of the various conventions (e.g., to conserve migratory species throughout their range [CMS] or to ensure the conservation and wise use of wetlands [Ramsar Convention]).

These challenges illustrate the simple fact that cross-convention planning through the NBSAP process does not and cannot replace planning processes for the implementation of conventions other than the CBD. Instead, the engagement in the NBSAP process is added to the list of responsibilities of NFPs from other biodiversity-related conventions. There is therefore the likelihood

that the NBSAP process is perceived as of lower priority than the obligations directly related to objectives of each individual convention, including the development of convention-specific implementation strategies and plans.

Recent Approaches to Improving Cooperation

The value of developing collaboration and cooperation in implementing the biodiversity-related conventions has long been recognized, and, as a result, is a regular agenda item at meetings of the governing bodies of each convention. In addition a number of mechanisms, indicatives, and projects have been implemented to foster cooperation and collaboration among the biodiversity-related conventions. (For a detailed overview see UN Environment Programme and Convention on Biological Diversity [2018].) This includes, for example, the aforementioned Liaison Group of Biodiversity-related Conventions and the UN Environment project to improve the effectiveness of and cooperation among biodiversity-related conventions and exploring opportunities for further synergies, which generated several of the UN Environment reports cited in this article and the UN project Realizing Synergies for Biodiversity. However, there has been some concern that progress has been too slow. Therefore, in the lead up to the 13th Conference of the Parties (COP) to the CBD held in in 2016, parties and secretariats representing all of the biodiversity-related conventions worked together to identify opportunities for further action. These deliberations led to a substantive CBD COP decision that includes national options for actions and a roadmap for improving synergies between conventions at the international level, as detailed in 2 annexes to the decision (CBD 2016).

Annex I sets out "options for enhancing synergies among the biodiversity-related conventions at the national level." Recognizing that "coordination mechanisms and coordinated actions serve as the foundation for enhancing coherence and synergies [..] across all issue areas," the options identified include the establishment, or strengthening, of a formal mechanism for the efficient coordination among NFPs and relevant authorities of biodiversity-related conventions. Specifically, these coordination mechanisms can play important roles in management of information and knowledge, national reporting, monitoring and indicators, communication and awareness raising, science-policy interface, capacity-building, and resource mobilization and utilization. The options identified place no specific obligations on governments because the CBD lacks the authority to prescribe specific implementation measures. Instead, it is recognized that agreed policy objectives need to be implemented by taking into account national circumstances. However, the options identified in annex I provide a powerful framework for governments and external organizations to prioritize actions and to support activities financially, technically, or through the generation of knowledge.

Annex II to this decision provides a "road map for enhancing synergies among the biodiversity-related conventions at the international level" and details specific actions focused on supporting national implementation. The road map includes measures for enhancing synergies among the biodiversity-related conventions at the international level in 3 areas: cooperation and coordination mechanisms; management of and avoiding duplication related to information and knowledge, national reporting, monitoring, and indicators; and capacity building. The annexes list desirable key actions and suggest a timeline. As also highlighted in the decision on the road map, the implementation of these actions up to 2020 will foremost depend on the governing bodies of the biodiversity-related conventions, including the CBD, and international organizations. To ensure a party-driven process to advance the synergies agenda and thus the likelihood of substantive outcomes at the subsequent CBD COP 14, which took place in November 2018, an informal advisory group consisting of parties to the CBD was established. This group was tasked to further prioritize the actions included in the roadmap as well as provide advice on their implementation. The meeting in November reinforced the mandate to continue with this work.

At first glance, the 2 annexes may not seem innovative, but the endorsement of activities by governments as being significant actions for building cooperation and synergies in the implementation of MEAs is valuable in promoting further action at both national and international levels. Furthermore, the adoption of the decision illustrates once more the role of the CBD as a driver for synergies among the biodiversity-related conventions, including through its pivotal role in convening the Liaison Group of Biodiversity-Related Conventions (which is composed of the heads of the secretariats of each of the biodiversity-related conventions).

Roles for Scientists

The 2 annexes of the CBD COP decision on cooperation (Convention on Biological Diversity 2016) suggest that scientists can help improve synergies among biodiversity-related conventions at the national level by establishing a science-policy platform to promote and facilitate the generation and use of best available knowledge; improving data gathering, reporting, and monitoring, including building more effective mechanisms for managing, sharing and using data; developing indicators that adequately support implementation of national plans and strategies that can be used across all the biodiversity-related conventions; and providing recommendations based on results accompanied with evidence for successful approaches and making biodiversity data more accessible for policy

makers. These suggestions complement existing science-policy instruments or mechanisms at global level, such as The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), which was established to serve the needs of all the biodiversity-related conventions and the Biodiversity Indicators Partnership, which was established to promote and coordinate the development and delivery of biodiversity indicators for use by the CBD and other biodiversity-related conventions. Thus, the 4 suggestions outlined in the annexes of the CBD COP decision on cooperation (Convention on Biological Diversity 2016) complement and support existing efforts to engage with the scientific community.

We see these 4 items as hugely important and encourage scientists to engage in the process of improving synergies among biodiversity-related conventions as well as to engage with IPBES and the activities that it promotes. This may require research institutions and universities to acknowledge the added value of such contributions and ensure that researchers have time and opportunities to engage in this work as part of their job. If not, we see a danger that many relevant people will not engage, and the process will be weaker as a result. Further, these priorities need to be acknowledged by government and private funding bodies to ensure appropriate allocation of resources. This will likely also require cross-institutional collaboration to ensure nationally and internationally coherent solutions. If done wisely, this research agenda will further specific actions identified by CBD parties, more broadly support the conservation and sustainable use of biodiversity and ecosystem services, and illustrate a way forward for large-scale research and data collection within the biological and earth sciences.

Beyond Aichi

Any research on cooperation among biodiversity-related conventions will also inform the negotiations on the post-2020 biodiversity framework, which will be agreed by governments at CBD COP 15 in 2020 and will succeed the current *Strategic Plan for Biodiversity 2011–2020*. The process for developing this framework was agreed in November 2018 at the CBD COP 14. It will be important that the post-2020 global biodiversity framework be developed through a participatory process that involves a wide range of stakeholders and also engage closely with the other biodiversity-related conventions. This will indeed be key to further building the involvement of the other biodiversity-related conventions, their ownership of the outcome, and ultimately further efforts to ensure coherent implementation at the national level.

Thus, we see the next 2 years as critical, with decisions to be made about the process and direction for the

post-2020 agenda for biodiversity. Development of the post-2020 global biodiversity framework will need a solid evidence base (e.g., Convention on Biological Diversity 2018*b*) and to be based on thorough review of progress in achieving the Aichi Biodiversity Targets. The CBD Secretariat has started inviting submission of initial views on the scope and content of the post-2020 global biodiversity framework, including on the scientific underpinning of the scale and scope of actions necessary. Consultation will continue into 2019 with multiple opportunities for all stakeholders to make input.

The 2030 Agenda for Sustainable Development (UN General Assembly 2015) will be particularly relevant as the post-2020 agenda for biodiversity is being developed because of the importance of biodiversity and ecosystem services in achieving the sustainable development goals and because a number of the targets in the 2030 Agenda are derived from the Aichi Biodiversity Targets and therefore have a target date of 2020 (Schultz et al. 2016; Convention on Biological Diversity 2017). With respect to synergies among biodiversity-related conventions, generally, more streamlined national implementation will help put more emphasis on biodiversity in national development planning for achievement of the Sustainable Development Goals. With regard to national implementation of the post-2020 global biodiversity framework, and in order to avoid time lags between adoption and implementation at the national level, ideas that are being explored include the suggestion that parties to the CBD might begin considering their national commitments in advance of the formal adoption of the post-2020 global biodiversity framework. This could and should include implementation of actions relevant to cooperation in implementing the biodiversity-related conventions.

Acknowledgments

Supporting Information

A full-text version of Table 2 (Appendix S1) is available online. The authors are solely responsible for the content and functionality of these materials. Queries (other than absence of the material) should be directed to the corresponding author.

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