# DRAFT RESOLUTION 7.XX (StC/DR8)[[1]](#footnote-1)

# AEWA’s CONTRIBUTION TO DELIVERING THE AICHI 2020 BIODIVERSITY TARGETS AND THE RELEVANCE OF THE SUSTAINABLE

# DEVELOPMENT GOALS

*Recalling* Decision X/2 of the tenth Conference of Parties to the Convention on Biological Diversity (CBD), Nagoya, Japan, 2010, establishing a Strategic Plan for Biodiversity 2011-2020 which “*represents a useful flexible framework that is relevant to all biodiversity-related conventions*”, and which includes 20 ‘Aichi’ Targets, which are addressed to all relevant intergovernmental organisations and other processes related to biodiversity,

*Recalling also* Resolutions 5.23 and 6.15 which outlined AEWA’s past and future contribution to the delivery of the Aichi 2020 Biodiversity Targets and the Sustainable Development Goals (SDGs),

*Noting* the relevance of the full implementation of the Convention on Migratory Species’ (CMS) Strategic Plan for Migratory Species 2015-2023 which already includes reference to the Aichi Targets to help guide the future strategy and goals of the CMS Family over the next five years,

*Recalling* the request from MOP5 to the Technical and Standing Committees to work together to assess progress on issues relevant to the Aichi Targets, and that they should present triennial assessments of AEWA’s contribution to each of the relevant Aichi Targets, elaborating further needs as necessary and appropriate, as an agenda item for each future MOP through to 2020,

*Recalling* *again* the request from MOP5 that the UNEP/AEWA and UNEP/CMS Secretariats work together with the CBD Secretariat to ensure that information on the status of migratory species including waterbirds are fully included in future CBD assessments of progress against relevant Aichi Targets, and that progress to this end should be reported to each Session of the Meeting of the Parties to AEWA until 2020,

*Noting* recent research[[2]](#footnote-2) on factors influencing waterbird declines, which shows that the strongest predictor of changes in waterbird abundance, and of conservation efforts having beneficial effects, is the effective national governance; that in areas where governance is on average less effective, waterbird declines are particularly pronounced; and further that whilst higher protected area coverage of wetland environments facilitates waterbird increases, this only occurs in countries with more effective governance,

*Recalling* the publication of the Ramsar Convention’s *Global Wetland Outlook*, which summarises the global status and trends of wetlands and wetland dependent species and, inter alia, stresses that: [TO BE ADDED ON PUBLICATION IN OCTOBER 2018]

* [key relevant message from GWO]
* [key relevant message from GWO]
* [key relevant message from GWO]

*Welcoming* the agreement by the United National General Assembly of *Transforming our world: the 2030 agenda for sustainable development*[[3]](#footnote-3)which presents 17 Goals to guide global sustainable development until 2030: “*a charter for people and the planet in the twenty-first century*”,

*Conscious* that – as outlined in Annex 3 – the full implementation of the Agreement, at all scales and by both Contracting Parties and other actors, has the potential to directly contribute to the attainment of the Sustainable Development Goals *inter alia* through actions related to the reduction of biodiversity loss; protection and restoration of habitats; climate change adaptation measures; education and awareness building; capacity development; contributing to food security and poverty reduction through the sustainable harvesting of waterbirds and the wise-use use of wetlands; and actions to address illegally taking, killing and trade,

*Noting particularly* that *Transforming our world* stresses that “*Regional and sub-regional frameworks can facilitate the effective translation of sustainable development policies into concrete action at national level*”,

*Noting* current work to prepare for the Post-2020 Biodiversity Framework,

*Conscious* of the opportunities and benefits that arise from collaborative working between the different multi-lateral environmental agreements and their secretariats to deliver actions to achieve both the Aichi Targets and the Sustainable Development Goals,

*The Meeting of the Parties:*

1. *Decides* to retire Resolution 6.15, the content of which is superseded by this Resolution;
2. *Notes* the assessment of the Technical Committee in Annex 1 to this Resolution as to priority needs with respect of AEWA’s contribution to the global Strategic Plan for Biodiversity 2011-2020 in regard to migratory waterbirds and their habitats;
3. *Adopts* the actions within Annex 2 to this Resolution as an updated assessment of AEWA’s contribution to the global Strategic Plan for Biodiversity 2011-2020;
4. *Determines* that the greatest benefit to development processes are those AEWA implementation actions that, in particular:
* ensure the conservation and wise use of national networks of protected areas, especially, but not restricted to, wetlands, and in both terrestrial and marine environments,
* ensure that land-uses are fully compatible with sustaining migratory waterbird populations,
* reduce, mitigate and compensate for habitat loss and degradation as appropriate, restore degraded habitats to reverse past losses and create new multifunctional wetlands,
* implement climate change adaption measures related to the waterbird habitats (especially but not restricted to wetlands),
* removing unnecessary causes of waterbird mortality and ensuring that harvests, where made, are sustainable, and
* develop strong engagement with local communities with respect to the management and wise use of waterbirds and their wetland habitats;
1. *Urges again* thatContracting Parties ensure that those national authorities responsible for AEWA implementation are fully involved in the process to update national biodiversity strategies and action plans as requested by CBD Decision X/2, in order to further promote synergies between biodiversity-related treaties;

6 *Urges* Contracting Parties to highlight to their development agencies, as appropriate, the relevance of AEWA implementation in the context of SDG-delivery, and to stress the need to better integrate actions for waterbird and wetland conservation within relevant development projects so as to achieve benefits, not just for waterbirds, but also for human communities; and

7. *Requests* the Technical Committee to bring, to MOP8 (2021), a final assessment of AEWA’s contributions to the Strategic Plan for Biodiversity 2011-2020, and a reflection on AEWA’s potential contribution to the post-2020 development agenda.

**Annex 1: The Technical Committee’s 2018 assessment as to priority needs with respect to AEWA’s Contribution to the Strategic Goals and Aichi Targets of the Strategic Plan for Biodiversity, 2012-2020 with regard to migratory waterbirds and their habitats**

| **Aichi Target** | **Technical Committee’s 2018 assessment of priority needs in respect of delivery of Aichi Targets (with regard to migratory waterbirds)** |
| --- | --- |
| ***Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society*** |  |
| **Target 1**  |  |
| By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably. | **Relevance of Target for AEWA:**A central target as reflected in the emphasis that has been placed on Communications, Education and Public Awareness (CEPA).Waterbird migratory movements and the international context provided by flyway systems are inherently interesting and give major opportunities for communicating biodiversity conservation at multiple scales.**TC assessment of needs:**AEWA has a Communications Strategy, and CEPA issues are also central to the Plan for Africa, however much more needs to be undertaken, particularly in developing countries, to implement the identified needs. Continued input to and development of World Migratory Bird Day provides relevant opportunities.MOP7 National Reports indicate good progress in the development of education and awareness programmes by some Parties, however, progress in many countries is hampered by significant resource and other constraints. [UPDATE ASSESSMENT WHEN MOP7 REPORTS ANALYSED]Note that measuring progress against this target is inherently difficult other than using indirect metrics. |
| **Target 2**  |  |
| By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty-reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems. | **Relevance of Target for AEWA:** **Directly relevant** to AEWA in the context of the socio-economic values of migratory waterbirds, their consumptive and non-consumptive uses, and the benefits that also derive from the conservation of their wetland habitats. Particularly but not exclusively relevant in Africa in the context of integration of migratory waterbird conservation within poverty reduction strategies.**TC assessment of needs:** Further also to CMS Resolution 10.18[[4]](#footnote-4), there is particular need to include these issues within National Biodiversity Strategies and Action Plans (NBSAPs) to ensure the values of waterbirds are fully recognised nationally. Noting that some guidance has already been developed by CMS[[5]](#footnote-5), consideration of further guidance specific to migratory waterbirds would be valuable.Issue gives particular opportunities for joint working with those responsible for implementation of related MEAs in particular CBD, Ramsar and the CMS Action Plan for the Conservation of African-Eurasian Migratory Landbirds. |
| **Target 3**  |  |
| By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed, in order to minimise or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.  | **Relevance of Target for AEWA:** Indirectly relevant to AEWA via impacts on habitats and species.**TC assessment of needs:** Best delivered through national and international actions and the activity of other MEAs and international processes that influence land-uses, fisheries and other relevant activities (e.g. the international financial sector). |
| **Target 4**  |  |
| By 2020, at the latest, governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits. | **Relevance of Target for AEWA:** **Highly relevant.** The issue of ensuring the sustainable use/harvest of waterbirds is central to AEWA’s objectives. AEWA can play a particularly significant role in assisting the delivery of related initiatives initiated by CMS. Ensuring that land-uses are fully compatible with sustaining migratory waterbird populations is critical to delivering Article III of the Agreement.**TC assessment of needs:**Needs significantly more attention from Parties especially with respect of the following issues:* developing, implementing and enforcing national legislation on hunting and trade;
* ensuring that consumptive uses of waterbirds are sustainable, *inter alia* through implementation of adaptive management systems of regulating harvests;
* collating and reporting data on harvest levels;
* establishing of international processes to share harvest information and making assessments of the sustainability of levels of take at biogeographic population scale;
* implementing the *Guidelines on sustainable harvest of migratory waterbirds*;
* eliminating illegal killing and/or illegal taking of migratory waterbirds where this occurs;
* phasing out the use of lead shot where this is still used, as an unnecessary cause of additional mortality;
* addressing inherently unsustainable uses of habitats; and
* implementing relevant AEWA guidance on all the above issues.

This provides major opportunities to work with a range of stakeholders at various scales. Full implementation of the Strategic Plan for Migratory Species 2015-2023 is highly relevant.Further development of management plans for priority exploited species including principles of adaptive management would be valuable at appropriate scales. |
| ***Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use***  |  |
| **Target 5**  |  |
| By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced. | **Relevance of Target for AEWA:** **Highly relevant.** The issue of habitat loss and degradation is central to delivering AEWA’s objectives.**TC assessment of needs:** Needs significantly more attention from Parties especially with respect of the following issues:* establishing schemes to monitor and report on the extent of wetlands and other habitats – and change over time – jointly with Ramsar and other relevant international processes;
* identifying and addressing the main drivers of habitat loss at flyway level;
* ensuring that important natural habitats of waterbirds are protected through legislative or other means; and
* developing a shared and evidence-based understanding of regional rates of wetland habitat loss as the basis for prioritised actions to address the drivers of such loss and degradation in the context of impacts on sustaining flyway populations.

Provides major opportunities[[6]](#footnote-6) to work with those involved with delivering the Ramsar Convention at various scales.  |
| **Target 6**  |  |
| By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits. | **Relevance of Target for AEWA:** **Highly relevant**. The issue of eliminating negative impacts from fisheries is central to AEWA’s objectives with respect of both marine and freshwater fish-eating birds. Issues include bycatch of waterbirds, impacts on bird populations, depletion of fish stocks (including shell-fisheries), and habitat destruction or degradation arising from destructive fishing techniques such as bottom-trawling.**TC assessment of needs:**The issues of eliminating bycatch from fisheries and of sustaining fish stocks are of major importance. For migratory seabirds in particular, the Regional Fisheries Management Organisations (RFMOs) provide a mechanism for AEWA Parties to promote best practice standards to that end.Similarly, these issues are also relevant to freshwater fisheries (some of which are of major significance both for waterbirds and people), and where conflicts can exist between birds and fishermen.It is a priority to ensure that the scale and extent of shell-fisheries do not impact on food resources for waterbirds (as a key element of ecosystem function).Typically, many of the negative impacts arise from the lack of implementation of established good practice(s).There are opportunities for joint work with a range of other international processes including the Agreement on the Conservation of Albatrosses and Petrels, RFMOs, the Arctic Migratory Birds Initiative, and processes under CBD. |
| **Target 7**  |  |
| By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity. | **Relevance of Target for AEWA:** **Highly relevant.** The need to ensure that agricultural and other wider habitats (outside protected areas) are managed sustainably for waterbirds is central to AEWA’s objectives.**TC assessment of needs:** Needs significantly more attention from Parties especially with respect of the following issues:* ensuring that agricultural and land-use policies adequately provide for the needs of migratory waterbirds (and other biodiversity) alongside the need for food production and other land-uses;
* ensuring that changes of land-use, for example from wetlands to intensive agriculture, or loss of extensive agriculture (via land abandonment), do not negatively impact on migratory waterbirds; and
* ensuring that appropriate policies (and/or the actions of decision makers) take full account of the ecological needs of migratory waterbirds thus providing benefits both to birds and people.

There is a major opportunity for AEWA to work with the CMS Action Plan for the Conservation of African-Eurasian Migratory Landbirds on these issues. |
| **Target 8**  |  |
| By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity. | **Relevance of Target for AEWA:****Highly relevant**. In particular, the lethal and sub-lethal effects of direct and indirect pollution are a significant issue for many waterbirds. **TC assessment of needs:** Pollution control (notably through the discharge of wastes and industrial effluents into the environment) needs attention in many developing countries, whilst the ecological effects of air-borne nutrient pollution are significant factors altering habitats across much of north-west Europe. Nutrient pollution arising from excess use of agricultural fertilizers can also have major ecological consequences for wetland habitats.Much more rapid progress is needed to phase out the use of lead shot.Pollution from oil spills and discharges can have devastating local impacts on waterbirds and other wildlife. Much guidance exists related to reducing this risk and needs to be more widely implemented.The need to address causes of pollution from plastic debris and micro plastics in the marine environment is being taken forward by a range of international processes and needs support from Contracting Parties. |
| **Target 9** |  |
| By 2020, invasive alien species and pathways are identified and prioritised, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.  | **Relevance of Target for AEWA:** **Highly relevant.** The need to control and eliminate established invasive non-native species, and prevent the establishment of others, is central to AEWA’s objectives. This issue is especially significant in the context of introduced predators on seabird breeding islands. As in the case of Ruddy Duck(*Oxyura jamaicensis*), hybridisation with non-natives can be a major threat to the genetic integrity of native waterbirds species.**TC assessment of needs:** Urgent attention by relevant Contracting Parties is needed to eliminate the Ruddy Duck from the Agreement area. More attention needs to be given by Parties to prevent the establishment and spread of other invasive non-native species (particularly aquatic plants) which could jeopardize migratory waterbirds or the ecological integrity of their habitats. Existing AEWA guidance needs to be better implemented.Priority attention should be given to better harmonising international reporting mechanisms for non-native waterbirds, including opportunities presented by AEWA, the EU Birds Directive, EU Regulation No 1143/2014 on the prevention and management of the introduction and spread of invasive alien species, and the International Waterbird Census. Better coordination between these instruments would be valuable.Noting considerable work by CBD on this topic[[7]](#footnote-7), internationally-agreed standards and guidance for risk assessment specifically with respect to non-native waterbirds would be useful.There are important education and public awareness messages concerned with the risk of keeping and release of non-native waterbirds with which AEWA could assist.MOP7 National Reports note significant activity by many Parties but also the non-implementation of relevant legislation by some Parties. |
| **Target 10**  |  |
| By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning. | **Relevance of Target for AEWA:** **Highly relevant.** The need to put in place climate change adaption measures related to the waterbird habitats (especially but not restricted to wetlands) is central to AEWA’s objectives.**TC assessment of needs:** MOP7 National Reports indicate [only a small number of Parties have yet taken actions to adapt to climate change impacts on waterbirds], either through systematic assessment of vulnerability of key habitats or species, and consequent review of relevant national conservation policies and/or national climate change action plan. [UPDATE ASSESSMENT WHEN MOP7 REPORTS ANALYSED]Higher priority needs to be given by Parties to climate change adaptation measures, so as to reduce climate change impacts through the protection and management of networks of key habitats and sites for waterbirds. |
| ***Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity*** |  |
| **Target 11** |  |
| By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes. | **Relevance of Target for AEWA:****Highly relevant.** The need to establish and appropriately manage networks of protected areas – in both the terrestrial and marine environments – is central to AEWA’s objectives. The issue is a major focus of the Plan of Action for Africa.**TC assessment of needs:**Much higher priority needs to be given by Parties to the completion of national networks of protected areas important for migratory waterbirds both in terrestrial and marine environments.With the additional of many seabird species to AEWA, there is particular need to identify and implement relevant marine protected areas and guidance to this end would be valuable especially for Parties outside Europe (where significant activity is already occurring).Much guidance on protected area management already exists and this needs to be used[[8]](#footnote-8). Similarly, the simple framework for site monitoring[[9]](#footnote-9) developed for Important Bird Areas provides an important relevant tool for Parties to use to assess progress.Delivering this Target provides major opportunities[[10]](#footnote-10) to work with those involved with delivering the Ramsar Convention at various scales, as well as other relevant processes including the World Heritage Convention, the Arctic Migratory Bird Initiative and the delivery of Nationally Determined Contributions under the Paris Agreement.MOP7 National Reports indicate the considerable work still needed to develop as coherent overview of nationally and internationally important sites for waterbirds within the Agreement Area. [UPDATE ASSESSMENT WHEN MOP7 REPORTS ANALYSED] |
| **Target 12** |  |
| By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained. | **Relevance of Target for AEWA:** **Highly relevant**. The need to prevent species extinctions and to reverse declines is central to AEWA’s objectives and the continued declining status of many species means the issue is of high priority.**TC assessment of needs:** As shown by the overall status of AEWA-listed populations (document AEWA/MOP 7.XX – CSR7) and continuing declines in parts of the Agreement area, much higher priority needs to be given by Parties to the conservation of threatened species, notably, but not restricted to the full implementation of relevant Species Action Plans.Full legal protection needs to be given to all relevant species listed in Column A of AEWA’s Action Plan with action taken to address illegal killing and/or illegal taking. As necessary, national legislation on hunting and trade needs to be developed, implemented and enforced. |
| **Target 13**  |  |
| By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimising genetic erosion and safeguarding their genetic diversity. | **Relevance of Target for AEWA:** Only indirectly relevant to AEWA’s objectives, although there are potentially issues related to hybridisation between wild and domestic-bred waterbirds.**TC assessment of needs:** Little that AEWA can directly contribute to this Target. |
| ***Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services***  |  |
| **Target 14**  |  |
| By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable. | **Relevance of Target for AEWA:** **Highly relevant**. The need to ensure that important habitats for waterbirds are subject to wise and multifunctional use is central to AEWA’s objectives and will best ensure their long-term survival in the face of multiple pressures. The restoration of degraded habitats is particularly important to reverse past losses. It is critical to involve local populations in wetland protection and management not just in the context of biodiversity conservation but with respect to livelihood needs. This issue is particularly, but by no means exclusively, relevant in Africa (where the issue is a focus of the AEWA Plan of Action for Africa[[11]](#footnote-11)).**TC assessment of needs:** Especially, with ever growing water resource demand, more attention needs to be given to ensuring that demand for ecosystem services is integrated – on a sustainable basis - into the management of important areas for waterbirds.There are important training needs and the Wings over Wetlands Flyways Training Kit[[12]](#footnote-12) is highly relevant and needs wider dissemination and use.It would be useful to develop a number of case studies summarising the socio-economic benefits (including food security and other livelihood requirements) accruing to local populations from the sustainable management of wetlands and the sustainable use of the waterbirds that depend on these areas. The issue provides a major opportunity to work with both the Ramsar Convention and the CMS Action Plan for the conservation of African-Eurasian Migratory Landbirds. |
| **Target 15** |  |
| By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.  | **Relevance of Target for AEWA:** **Highly relevant.** The restoration of degraded wetland and other ecosystems will directly benefit waterbird populations and thus significantly contribute to AEWA’s objectives. Given the importance of some wetlands (notably peatlands and inter-tidal mudflats and mangrove swamps) as both carbon stores and as bird habitats, restoration of these areas will have major benefits for migratory waterbirds.**TC assessment of needs:** Parties should give particular attention to the restoration of peatlands and coastal wetlands (including mangroves) in particular, as habitats of particular importance for migratory waterbirds. In the latter context, BirdLife International’s Caring for Coasts Initiative[[13]](#footnote-13) may provide opportunities.The issue provides a significant opportunity to work with both the Ramsar Convention and the CMS Action Plan for the conservation of African-Eurasian Migratory Landbirds. |
| **Target 16** |  |
| By 2015, the *Nagoya Protocol on Access to Genetic* *Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization* is in force and operational, consistent with national legislation. | **Relevance of Target for AEWA:** Only indirectly relevant to AEWA’s objectives.**TC assessment of needs:** Little that AEWA can directly contribute to this Target. |
| ***Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building*** |  |
| **Target 17** |  |
| 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.  | **Relevance of Target for AEWA:** **Highly relevant**. Theoretically aims to facilitate the development of national policies for AEWA implementation, but not all NBSAPs have relevant content, nor have all countries yet completed plans.**TC assessment of needs:** High priority should be given to the completion of NBSAPs by the three Parties still to do this, and the full implementation of such plans once adopted.As relevant, Parties should use the guidance adopted by CMS[[14]](#footnote-14),[[15]](#footnote-15) on integration of migratory species issues with NBSAPs when these are being revised.In the context of national implementation of AEWA, synergies should always be sought with the implementation of other MEA obligations – as already stressed in the context of Ramsar by Resolution 5.19. |
| **Target 18**  |  |
| By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels. | **Relevance of Target for AEWA:** **Very relevant.** Traditional knowledge of waterbirds is important in many parts of the Agreement area with respect to the use and management of migratory waterbirds which – where relevant - always needs to involve local communities.**TC assessment of needs:**A better understanding of the traditional knowledge, practices of indigenous and local communities relevant for the conservation and sustainable use of waterbirds is needed. |
| **Target 19** |  |
| By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied. | **Relevance of Target for AEWA:** **Highly relevant.** Knowledge of the status and trends of waterbird populations, factors affecting these, and their habitat requirements are fundamental to the implementation of the Agreement.**TC assessment of needs:**Needs significantly more attention from Parties especially with respect of the following issues:* ensuring that the International Waterbird Census (as the primary means by which AEWA undertakes status assessments) is adequately, and sustainably funded;
* ensuring national inventories of wetland and other habitats exist in each Contracting Party; and
* ensuring that policies and practices for the conservation and management of migratory waterbirds are always based on best available scientific evidence.
 |
| **Target 20** |  |
| By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the *Strategy for Resource Mobilization*, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties. | **Relevance of Target for AEWA:** **Highly relevant**. Adequate funding to implement the Agreement is critical to ensure its ultimate effectiveness. **TC assessment of needs:**Parties should provide funding adequate to fully implement the Agreement. |

**Annex 2: AEWA’s Contribution to the Strategic Goals and Aichi Targets of the Strategic Plan for Biodiversity, 2012-2020**

**[Strategic Goal A](http://www.cbd.int/sp/targets/%22%20%5Cl%20%22GoalA): Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society**

[**Strategic Goal B**](http://www.cbd.int/sp/targets/#GoalB)**: Reduce the direct pressures on biodiversity and promote sustainable use**

[**Strategic Goal C**](http://www.cbd.int/sp/targets/#GoalC)**: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity**

[**Strategic Goal D**](http://www.cbd.int/sp/targets/#GoalD)**: Enhance the benefits to all from biodiversity and ecosystem services**

[**Strategic Goal E**](http://www.cbd.int/sp/targets/#GoalE)**: Enhance implementation through participatory planning, knowledge management and capacity building**

| **Aichi Target** | **AEWA’s past contribution (1999-2015)** | **AEWA’s contribution in the triennium 2016-2018** | **AEWA’s future contribution (2019-2021)** |
| --- | --- | --- | --- |
| ***Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society*** |
| **Target 1**  |  |  |  |
| By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably. | * Adoption of a Communications Strategy by MOPs 3 and 6 (Resolutions 3.10 & 6.6)
* Strategic Plan agreed (2008) with relevant objectives:
	+ ***Objective 4:*** *To improve Communication, Education and Public Awareness (CEPA) about migratory waterbird species, their flyways, their role in alleviating poverty, threats to them and the needs for measures to conserve them and their habitats.*
* Adoption of *Guidelines on the development of ecotourism at wetlands*
* Adoption of *Guidelines on reducing crop damage, damage to fisheries, bird strikes and other forms of conflict between waterbirds and human activities*
 | * Revised Communications Strategy implemented
* Annual organisational support provided for World Migratory Bird Day
* Implemented relevant actions from Plan of Action for Africa 2012-2018
 | **Implement Targets for AEWA Strategic Plan 2019-2027 Objective 2:**2.3 Best-practice codes and standards for waterbird hunting are in place and applied to support enforcement of hunting laws and regulations, including customary law where appropriate and consistent with AEWA objectives, in ensuring sustainable use of migratory waterbirds in at least three-quarters of Contracting Parties.2.6 Consideration of the ecosystem services derived from migratory waterbirds is integrated into policy and decision-making processes that affect waterbird habitats in at least two-thirds of AEWA Parties.* Adopt and implement relevant actions from AEWA’s Plan of9Action for Africa 2012-20XX
* Continued annual organisational support provided for World Migratory Bird Day and other communications and awareness raising activities
 |
| **Target 2**  |  |  |  |
| By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.  |  | * Implemented relevant actions from AEWA’s Plan of Action for Africa 2012-2018
 | **Implement Targets for Strategic Plan Objective 3 and 4:**3.4 The need to maintain the importance and integrity of AEWA flyway network sites is taken into account in planning and decision-making processes in all Contracting Parties.4.3 National habitat conservation and management priorities have been identified and integrated into relevant sectoral policies of at least two-thirds of Contracting Parties.* Implement relevant actions from AEWA’s Plan of Action for Africa 2019-20XX
* Contracting Parties to develop national implementation working groups, in cooperation with relevant implementation of other multi-lateral environmental agreements such as the Ramsar Convention: Resolution 5.19 *Encouragement of Further Joint Implementation of AEWA and the Ramsar Convention*
 |
| **Target 3**  |  |  |  |
| By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed, in order to minimise or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.  | * Adopted and implemented Resolution 5.16 *Renewable Energy and Migratory Waterbirds* and Resolution 6.11 on *Addressing impacts of renewable energy deployment on migratory waterbirds*
 | * Implemented Resolutions 5.16 Resolution 6.11
 | **Implement Targets for Strategic Plan Objective 3:**3.5 Legal or administrative measures are in place at national level – and being implemented effectively – to avoid, mitigate and compensate for adverse impacts of development activities and other pressures, including the impacts of climate change, on sites of national and international importance for migratory waterbirds in all Contracting Parties.Implement Resolution 5.16 and Resolution 6.11  |
| **Target 4**  |  |  |   |
| By 2020, at the latest, governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits. | * Develop and implement International Species Management Plan for the Svalbard population of the Pink-footed Goose *Anser brachyrhynchus*
* Adoption of Resolution 3.19 *Implementing the Addis Ababa Principles and Guidelines for the sustainable use of biodiversity*
* Adoption of *Guidelines on sustainable harvest of migratory waterbirds*
* Adoption of *Guidelines on how to avoid, minimise or mitigate impact of infrastructural developments and related disturbance affecting waterbirds*
* Adoption of *Guidelines on the development of ecotourism at wetlands*
* Adoption of *Guidelines on regulating trade in migratory waterbirds*
* Adoption of *Guidelines on the management of key sites for migratory waterbirds*
* Strategic Plan agreed (2008) with relevant objectives:
	+ ***Objective 2:*** *To ensure that any use of waterbirds in the Agreement area is sustainable*
* Adoption of revised *Guidelines on regulating trade in migratory waterbirds*
* Adoption of *Guidelines on national legislation for the protection of species of migratory waterbirds and their habitats* (updating and revising the former *Guidelines on Hunting and Trade legislation*)
* Adoption of revised *Guidelines on sustainable harvest of migratory waterbirds*
 | * Implement International Species Management Plan for the Svalbard population of the Pink-footed Goose *Anser brachyrhynchus* based on adaptive management principles;
* Commence implementation of International Single Species Action Plan for the Taiga Bean Goose *Anser f. fabalis* based on adaptive management principles;
* Establish and operationalise the European Goose Management Platform
* 71 AEWA Parties that are Parties to CMS adopted Resolution 11.15 on *Preventing poisoning of migratory birds* addressing, *inter alia*, the need to prevent waterbird poisoning by agricultural chemicals, poison baits; and the use of toxic lead shot and fishing weights;
* Lead gunshot fully phased out in wetlands in [Belgium, Bulgaria, Croatia and Estonia with a timetable established to this end in Switzerland] [UPDATE ASSESSMENT WHEN MOP7 REPORTS ANALYSED]
 | **Implement Targets for Strategic Plan Objective 2:**2.3 Best-practice codes and standards for waterbird hunting are in place and applied to support enforcement of hunting laws and regulations, including customary law where appropriate and consistent with AEWA objectives, in ensuring sustainable use of migratory waterbirds in at least three-quarters of Contracting Parties.2.4 Adaptive harvest management regimes are in place and being effectively implemented at flyway level in the framework of Species Action or Management Plans for all prioritised declining quarry populations and ‘conflict’ species[[16]](#footnote-16).Parties should:* Evaluate the effectiveness of national measures already taken to phase out the use of lead shot and to phase in non-toxic alternatives in wetlands; and
* Engage with all relevant stakeholders, *inter alia* hunters and the manufacturing industry, to understand and address barriers to implementation; and to establish and implement joint communication strategies,
* Where requested, the Secretariat and the Technical Committee will provide support to individual Parties conducting such evaluation and engagement.
* Implement CMS Resolution 11.15 on *Preventing poisoning of migratory birds* addressing, *inter alia*, the need to prevent waterbird poisoning by agricultural chemicals, poison baits; and the use of lead shot and fishing weights.
 |
| ***Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use*** |
| **Target 5**  |  |  |  |
| By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced. | * Action Plan urges establishment of site networks to protect important wetland habitats
 | * Adopted the African Initiative for the conservation of migratory waterbirds and their habitats in Africa
* Implementation of the AEWA Action Plan and Strategic Plan
* Adoption of *Guidelines on how to avoid or mitigate impact of electricity power grids on migratory birds in the African-Eurasian region*
 | **Implement Targets for Strategic Plan Objective 2, 3 and 4:**2.6 Consideration of the ecosystem services derived from migratory waterbirds is integrated into policy and decision-making processes that affect waterbird habitats in at least two-thirds of AEWA Parties.3.5 Legal or administrative measures are in place at national level – and being implemented effectively – to avoid, mitigate and compensate for adverse impacts of development activities and other pressures, including the impacts of climate change, on sites of national and international importance for migratory waterbirds in all Contracting Parties.4.1 Priorities for habitat conservation and management in the wider environment (as defined at the Objective level) are identified at Agreement level and corresponding actions are being implemented in at least half of Contracting Parties.4.2 At least half of the key international policy mechanisms identified[[17]](#footnote-17) have made tangible progress towards integrating the waterbird habitat priorities and prescriptions of AEWA as they relate to the wider environment.4.4 At least three of the innovative, international multi-stakeholder partnerships[[18]](#footnote-18) result in the improved management, creation and/or restoration of waterbird habitats in the wider environment.* Implement the AEWA Action Plan, Strategic Plan and Plan of Action for Africa
 |
| **Target 6**  |  |  |  |
| By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits. | * International Single Species Action Plans
* Finalised and adopted Multi-species Action Plan for Benguela Upwelling System Coastal Seabirds
 |  | **Implement Targets for Strategic Plan Objective 1:**1.6 AEWA priorities relating to four causes of unnecessary additional mortality and other key threats to migratory waterbirds and their habitats[[19]](#footnote-19) are integrated in key multilateral processes.[[20]](#footnote-20)* Implement Multi-species Action Plan for Benguela Upwelling System Coastal Seabirds
* Develop active collaboration with other international processes, including the Agreement on the Conservation of Albatrosses and Petrels, to promote conservation measures to benefit AEWA-listed seabirds
 |
| **Target 7**  |  |  |  |
| By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity. | * Adoption of *Guidelines on the management of key sites for migratory waterbirds*
 |  | **Implement Targets for Strategic Plan Objective 3 and 4:**3.5 Legal or administrative measures are in place at national level – and being implemented effectively – to avoid, mitigate and compensate for adverse impacts of development activities and other pressures, including the impacts of climate change, on sites of national and international importance for migratory waterbirds in all Contracting Parties.4.1 Priorities for habitat conservation and management in the wider environment (as defined at the Objective level) are identified at Agreement level and corresponding actions are being implemented in at least half of Contracting Parties.4.2 At least half of the key international policy mechanisms identified[[21]](#footnote-21) have made tangible progress towards integrating the waterbird habitat priorities and prescriptions of AEWA as they relate to the wider environment.* Noting the value of waterbirds as indicators of wider environmental conditions especially with respect to agriculture (e.g. lowland breeding waders), AEWA Technical Committee to work with Ramsar, the EU and other international actors to assess the potential utility of policy-related guidance for sustainable management of agriculture and aquaculture and make recommendations to MOP7 as appropriate.
 |
| **Target 8**  |  |  |  |
| By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity. |  |  | * Implement Resolution 5.12 “*Adverse Effects of Agrochemicals on Migratory Waterbirds in Africa*”engaging with the Stockholm Convention on Persistent Organic Pesticides and other relevant international processes as appropriate, such as the CMS Scientific Council Working Group on minimising the risk of poisoning to migratory birds.
* Support implementation of conclusions from 25th and 26th meetings of the UNEP Governing Council/Global Ministerial Environment Forum (2009 & 2011) especially as regards chemical management/ pollution issues relevant to waterbirds, notably with regards to lead.
* Implement CMS Resolution 11.15 on *Preventing poisoning of migratory birds* addressing, *inter alia*, the need to prevent waterbird poisoning by agricultural chemicals, poison baits; and the use of toxic lead shot and fishing weights.
 |
| **Target 9** |  |  |  |
| By 2020, invasive alien species and pathways are identified and prioritised, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.  | * Adoption of *Guidelines on Avoidance of Introductions of non-native Waterbird Species*
* Adoption of Resolution 4.5 *Introduced non-native waterbirds in the Agreement area*
* *Review on the Status of Introduced Non-native Species of Waterbirds* (AEWA/MOP 4.12; 2008)
* Adoption of Resolution 5.15 *Impact of invasive alien aquatic weeds on waterbird habitats in Africa*
* Adoption of revised *Guidelines on avoidance of introductions of non-native waterbird species*
 | * Continued very good progress to eradicate the Ruddy Duck (*Oxyura jamaicensis*) from the UK. [Control measures also undertaken in Belgium and France, planned in Switzerland, but with no implementation of planned controls in Morocco and Sweden.] [UPDATE ASSESSMENT WHEN MOP7 REPORTS ANALYSED]
 | * Eradication of the Ruddy Duck (*Oxyura jamaicensis*) from the AEWA region, per Resolution 4.5, before 2020
* Enhanced activity to control invasive non-native waterbirds, notably Sacred Ibis (*Threskiornis aethiopicus*) where it is non-native (per Resolution 4.5)

**Implement Target for Strategic Plan Objective 1:**1.6 AEWA priorities relating to four causes of unnecessary additional mortality and other key threats to migratory waterbirds and their habitats[[22]](#footnote-22) are integrated in key multilateral processes.[[23]](#footnote-23) |
| **Target 10**  |  |  |  |
| By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning. | * Adoption of Resolution 3.17 *Climate change and migratory waterbirds*
* Adoption of Resolution 5.13 *Climate Change Adaptation Measures for Waterbirds* and Resolution 6.6 *Updated advice on climate change adaptation measures for waterbirds*
 | * Limited progress to start to assess analyses of habitat and species vulnerability develop adaptation programmes accordingly.
 | * Implement Resolution 6.6 *Updated advice on climate change adaptation measures for waterbirds*
 |
| ***Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity*** |
| **Target 11** |  |  |  |
| By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes. | * Action Plan urges establishment of site networks to protect important wetland habitats
* Adoption of *Guidelines on the management of key sites for migratory waterbirds*
* Adoption of *Guidelines on the preparation of site inventories for migratory waterbirds*
* *Report on the Site Network for Waterbirds in* *the Agreement Area* (document AEWA/MOP 5.15)
 | * [MOP6 National Reports report a total of 128,422 nationally important sites (covering 88.46 million ha) for migratory waterbirds, of which all but 478 are legally protected. Of legally protected sites, 68% have management plans in place.] [UPDATE ASSESSMENT WHEN MOP7 REPORTS ANALYSED]
* [MOP6 National Reports report a total of 1,356 internationally important sites (covering 25.75 million ha) for migratory waterbirds of which 51% have management plans in place.] [UPDATE ASSESSMENT WHEN MOP7 REPORTS ANALYSED]
 | **Implement Targets for Strategic Plan Objective 3:**3.1 Known sites of national or international importance44 for populations listed in Table 1 of the AEWA Action Plan have been reviewed confirmed (in conformity with Paragraph 3.1.2 of the Action Plan) and at least three-quarters of the priority site gaps[[24]](#footnote-24) are filled in the case of Contracting Parties.3.3 At least two-thirds of all flyway network sites are actively protected and actively managed, focusing in particular on internationally important sites and those in transboundary areas.3.4 The need to maintain the importance and integrity of AEWA flyway network sites is taken into account in planning and decision-making processes in all Contracting Parties.* All Parties should address site management issues and which sites to prioritise for designation, including consideration of the tentative conclusions and recommendations of the preliminary report on the Site Network in the Agreement Area.
* CSN Tool and Flyway Training Kit need to be used
 |
| **Target 12** |  |  |  |
| By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.{Actions for Target 12 are also relevant to Targets 3 and 4} | * Strategic Plan agreed (2008) with the over-arching goal: *To maintain or restore migratory waterbird species and their populations at a favourable conservation status throughout their flyways*
	+ ***Objective 1:*** *To undertake conservation measures so as to improve or maintain conservation status of waterbird species and their populations*
* Adoption of *Guidelines on the preparation of National Single Species Action Plans for migratory waterbirds*
* Single Species Action Plans developed for 15 species and implemented for six globally threatened species
* Adoption of *Guidelines for a waterbird monitoring protocol*
* Reporting of status of migratory waterbirds via triennial AEWA Conservation Status Reviews
* Adoption of revised *Guidelines on identifying and tackling emergency situations for migratory waterbirds*
 | * Adoption of *Guidelines for the translocation of waterbirds for conservation purposes: complementing the IUCN guidelines*
* At MOP 6, SSAPs adopted for Shoebill *Balaeniceps rex*, Grey Crowned Crane *Balearica regulorum*, Taiga Bean Goose *Anser f. fabalis*, Long-tailed Duck *Clangula hyemalis*, Eurasian Curlew *Numenius arquata* and Northern Bald Ibis *Geronticus eremita* (revision of 2005 ISSAP). International multi-species Action Plan for Benguela Upwelling System Coastal Seabirds adopted.
* Support given for implementation of existing SSAPs.
 | **Implement Targets for Strategic Plan Objectives 1 and 2:**1.2 All priority species/populations[[25]](#footnote-25) are covered by effectively implemented Species Action Plans at flyway level[[26]](#footnote-26).1.3 For all other populations in unfavourable conservation status[[27]](#footnote-27), science-based conservation and management guidance is made available by AEWA and/or its Partners and is applied by Parties and other stakeholders.2.4 Adaptive harvest management regimes are in place and being effectively implemented at flyway level in the framework of Species Action or Management Plans for all prioritised declining quarry populations and ‘conflict’ species[[28]](#footnote-28).Single Species Action Plans adopted for White-headed Duck *Oxyura leucocephala,* Velvet Scoter *Melanitta fusca*, and Dalmatian Pelican *Pelecanus crispus*.Reports made to each MOP on the status of species for which Single Species Action Plans (SSAP) have been developedSeek to establish international coordination mechanisms for each SSAP |
| **Target 13**  |  |  |  |
| By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimising genetic erosion and safeguarding their genetic diversity. |  |  |  |
| ***Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services***  |
| **Target 14**  |  |  |  |
| By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable. |  | * Commenced implementation of relevant actions from AEWA’s Plan of Action for Africa 2012-2018
 | **Implement Targets for Strategic Plan Objectives 2 and 4:**2.5 Waterbird-related ecotourism is promoted in at least half of the Contracting Parties following the model/example of at least three ecotourism pilots focusing on migratory waterbirds that exemplify benefits to local communities as well as for the conservation status of AEWA populations and their habitats.2.6 Consideration of the ecosystem services derived from migratory waterbirds is integrated into policy and decision-making processes that affect waterbird habitats in at least two-thirds of AEWA Parties.4.4 At least three of the innovative, international multi-stakeholder partnerships[[29]](#footnote-29) result in the improved management, creation and/or restoration of waterbird habitats in the wider environment.* Implement relevant actions from AEWA’s Plan of Action for Africa 2012-2018
 |
| **Target 15** |  |  |  |
| By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.  |  |  | **Implement Targets for Strategic Plan Objective 4:**4.4 At least three of the innovative, international multi-stakeholder partnerships[[30]](#footnote-30) result in the improved management, creation and/or restoration of waterbird habitats in the wider environment.* Technical Committee to work *inter alia*, with the Ramsar Convention’s Scientific and Technical Review Panel (STRP) and relevant CBD’s Programmes of Work, to make recommendations as to priorities for wetland conservation and management recommendations that would both benefit migratory waterbirds, and contribute to climate change mitigation and adaptation, and/or to combating desertification
 |
| **Target 16** |  |  |  |
| By 2015, the *Nagoya Protocol on Access to Genetic* *Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization* is in force and operational, consistent with national legislation. |  |  |  |
| ***Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building*** |
| **Target 17** |  |  |  |
| 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.  |  | * 74 AEWA Contracting Parties have adopted NBSAPs whilst those for Cyprus, Libya and Monaco are currently under development
 | **Implement Targets for Strategic Plan Objective 5:**5.5 Conservation of migratory waterbirds is integrated into the new generation of NBSAPs[[31]](#footnote-31) and/or similar national plans/policies by at least three-quarters of Contracting Parties.* Ensure that those authorities responsible for AEWA implementation are fully involved in the process to update national biodiversity strategies and action plans so as further to promote synergies between biodiversity-related treaties
 |
| **Target 18**  |  |  |  |
| By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels. |  |  | * Technical Committee to develop understanding of implications of traditional harvest methodologies and the implications these may have for AEWA implementation.
 |
| **Target 19** |  |  |  |
| By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied. | * Strategic Plan agreed (2008) with relevant objectives:
	+ ***Objective 3:*** *To increase knowledge about species and their populations, flyways and threats to them as a basis for conservation action*
* Triennial publication of *Conservation Status Review* summarises knowledge of AEWA-listed migratory waterbirds
* CSN Tool and Flyway Training Kit published
 | * Waterbird Monitoring Partnership developed to take forward the development of the International Waterbird Census (IWC)
* The African-Eurasian Waterbird Monitoring partnership established the Waterbird Fund to resource the IWC and other conservation work
* Publication of seventh edition of AEWA’s *Conservation Status Review*
 | **Implement Targets for Strategic Plan Objectives 1, 3 and 5:**1.4 The quality of waterbird population status assessments, including information on drivers of population trends, is improved so that at least two-thirds of all AEWA populations are being assessed on the basis of the most complete and up-to-date monitoring information available.1.5 Decision-making for national and flyway-level conservation and management of waterbird populations is based on the best-available monitoring data.3.2 The status of, the threats to, and the effectiveness of conservation measures implemented at flyway network sites are being assessed at flyway scale, using data provided by at least three-quarters of Contracting Parties.5.1 Key gaps in scientific and technical information, including population monitoring data, required for implementation of the Agreement have been identified and assessed and initiatives to fill all priority gaps have been completed or are in progress.* Technical Committee to make proposals as to further needs regarding implementation of Objective 3 of the Strategic Plan in the context of the needs to improve, widely share and transfer, and apply scientific information on waterbirds.
 |
| **Target 20** |  |  |  |
| By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the *Strategy for Resource Mobilization*, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties. |  | * Adopted Resolutions 6.18 and 7.XX on *Financial and administrative matters*
 | **Implement Targets for Strategic Plan Objective 5:**5.6 The resources required for coordination and delivery of the Strategic Plan at international and national levels have been assessed as realistically as possible and corresponding resource mobilisation plans implemented.[[32]](#footnote-32)* Parties and other stakeholders are encouraged to consider increasing funding and other capacity needs for the implementation of the Single Species Action Plans for globally threatened species and develop such plans for all globally threatened species.
* Implementation of a long-term basic structural funding regime for the IWC and strengthened strategic approach to IWC development and maintenance.
 |

**Annex 3: A summary of AEWA’s contribution to the Sustainable Development Goals**

Those Sustainable Development Goals (SDG) which are highlighted below in bold and shaded are those for which the full implementation of AEWA can make specific contributions.

**SUSTAINABLE DEVELOPMENT GOALS**

**Goal 1. End poverty in all its forms everywhere**

**Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture**

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 5. Achieve gender equality and empower all women and girls

**Goal 6. Ensure availability and sustainable management of water and sanitation for all**

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all

**Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 10. Reduce inequality within and among countries

Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable

**Goal 12. Ensure sustainable consumption and production patterns**

**Goal 13. Take urgent action to combat climate change and its impacts\***

 \* Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.

**Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development**

**Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

**Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development**

**Summary of those SDG targets to which full implementation of AEWA can contribute.**

Relevance is indicated as either:

* **Direct (higher) relevance** – where actions to implement the Agreement will directly contribute to the relevant target; or
* **Indirect relevance** – where actions are of indirect (or lower) significance.

| **Target** | **Relevance** | **Nature of AEWA’s contribution** |
| --- | --- | --- |
| **Goal 1. End poverty in all its forms everywhere**  |
| **1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance | Direct | Target 2 of the *Plan of Action for Africa 2012-2017* calls for community based natural resource management strategies based on wetlands and waterbirds to be developed to sustain rural development and improve conservationObjective 1.4 of the Strategic Plan 2019-2027 is relevant |
| **Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture** |
| **2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality | Indirect | Many waterbirds benefit from sustainable, low-intensity agriculture (which benefits land and soil quality), whilst wetland wise-use (including restoration and conservation of coastal habitats) helps adapt to climate change (Resolution 6.6) and reduce disaster risksObjectives 4.1, 4.3 and 4.4 of the Strategic Plan 2019-2027 are relevant |
| **Goal 6. Ensure availability and sustainable management of water and sanitation for all** |
| **6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all | Indirect | Wise-use of wetlands consistent with AEWA obligations can facilitate water supply as an ecosystem service to human communities |
| **6.3** By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally | Direct | Actions to implement AEWA’s Action Plan para 4.3.9 will reduce pollution, oil spillages and waste discharge, whilst para 3.2.3, *inter alia*, addresses the need to regulate the use of agricultural chemicals and waste water which relates to impacts of nitrogen pollution (both eutrophication and hypertrophication) impacting on waterbirds, their habitats, and drinking water supplies |
| **6.5** By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate | Indirect | Article III.2d (General Conservation Measures) requires that Parties co-ordinate their efforts to protect wetlands “in particular where wetlands extend over the area of more than one Party”. The protection of such shared wetlands[[33]](#footnote-33) will typically support the provision of water as a relevant ecosystem service to all concerned PartiesObjectives 3.3, 3.4, 3.5, 4.3 and 4.4 of the Strategic Plan 2019-2027 are relevant |
| **6.6** By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes | Direct | Although the habitats of importance to waterbirds are not restricted to water-related ecosystems, wetlands are of major significance as noted in the Preamble to the AgreementArticle III.2c (General Conservation Measures) and Action Plan sections 3.2 (Conservation of Areas) and 3.3 (Rehabilitation and Restoration) require Parties to establish a network of sites and habitats and “encourage the protection, management, rehabilitation and restoration of these sites”Objectives 3.3, 3.4, 3.5, 4.3 and 4.4 of the Strategic Plan 2019-2027 are relevant |
| **Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all** |
| **8.9** By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products |  | Objectives 2.5 of the Strategic Plan 2019-2027 is relevant |
| **Goal 12. Ensure sustainable consumption and production patterns** |
| **12.2** By 2030, achieve the sustainable management and efficient use of natural resources | Direct | Article III.2b (General Conservation Measures) requires that Parties “ensure that any use of migratory waterbirds … is sustainable for the species as well as for the ecological systems that support them”Objectives 2.1, 2.2, 2.3, 2.4 and 3.5 of the Strategic Plan 2019-2027 are relevant |
| **12.4** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment | Indirect | The Parties have set as an objective that “The use of lead shot for hunting in wetlands is phased out in all Contracting Parties” {Strategic Plan Target 2.1}Actions to implement AEWA’s Action Plan para 4.3.9 will reduce pollution, oil spillages and discharge of wastes whilst para 3.2.3, *inter alia*, addresses the need to regulate the use of agricultural chemicals and discharges of waste water |
| **12.8** By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature | Direct | Actions to implement AEWA’s Action Plan section 6 (Education and Information) are especially targeted at wetland uses to promote the sustainability-based objectives of the Agreement |
| **12.a** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production | Indirect | Hunting according to AEWA’s principles will result in sustainable harvesting and thus socio-economic benefits for some communities |
| **12.b** Develop and implement tools tomonitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products | Indirect | Actions to implement AEWA’s Action Plan section 4.2 on ecotourism are supportive in seeking to encourage sensitive and appropriate[[34]](#footnote-34) eco-tourism at wetlands holding concentrations of waterbirds |
| **Goal 13. Take urgent action to combat climate change and its impacts\*** |
| \* *Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.* |
| **13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries  | Indirect | Climate change adaptation measures for waterbirds will reduce climate-related disaster risks Resolution 6.6 |
| **13.2** Integrate climate change measures into national policies, strategies and planning | Direct | Resolutions 5.13 and 6.6 seek to ensure that climate change adaptation measures are integrated within national policies, strategies and planning, and these will benefit both waterbirds and human communities |
| **13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning | Direct | Responses to changing climate are an important component of actions to implement Action Plan section 6 (Education and Information) and AEWA’s Communications Strategy Resolution 6.10 |
| **Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development** |
| **14.1** By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution  | Indirect | Actions to implement Action Plan para 4.3.9 will reduce pollution (including nutrient pollution), oil spillages and discharge of wastes whilst para 3.2.3, *inter alia*, addresses the need to regulate the use of agricultural chemicals and discharges of waste water |
| **14.2** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans | Direct | Article III.2c (General Conservation Measures) and Action Plan sections 3.2 (Conservation of Areas) and 3.3 (Rehabilitation and Restoration) require Parties to establish a network of sites and habitats and “encourage the protection, management, rehabilitation and restoration of these sites” Objectives 3.1, 3.3, 3.4, 3.5, 4.3 and 4.4 of the Strategic Plan 2019-2027 are relevant |
| **14.5** By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information | Direct | Article III.2c (General Conservation Measures) and Action Plan section 3.2 (Conservation of Areas) require Parties to establish a network of sites and habitats and encourage their protection and management |
| **Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss** |
| **15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements | Direct | Article III.2c (General Conservation Measures) and Action Plan sections 3.2 (Conservation of Areas) and 3.3 (Rehabilitation and Restoration) require Parties to establish a network of sites and habitats and “encourage the protection, management, rehabilitation and restoration of these sites” in liaison with relevant international frameworksObjectives 3.1, 3.3, 3.4, 3.5, 4.1, 4.3 and 4.4 of the Strategic Plan 2019-2027 are relevant |
| **15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally |  | Objective 4.1 of the Strategic Plan 2019-2027 is relevant |
| **15.3** By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world |  | Objectives 3.5, 4.1 and 4.4 of the Strategic Plan 2019-2027 is relevant |
| **15.4** By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development |  | Objective 4.1 of the Strategic Plan 2019-2027 is relevant |
| **15.5** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species | Direct | The central objective of the Agreement expressed in the broad objective of Article II.1 is to restore and maintain the conservation status of migratory waterbirdsArticle III.2c (General Conservation Measures) and Action Plan sections 3.2 (Conservation of Areas) and 3.3 (Rehabilitation and Restoration) require Parties to establish a network of sites and habitats and “encourage the protection, management, rehabilitation and restoration of these sites” in liaison with relevant international frameworksArticle III.1 requires Parties to “take measures to conserve migratory waterbirds, giving special attention to endangered species and well as those with an unfavourable conservation status”Objectives 1.2, 1.3, 3.1, 3.3, 3.4, 3.5 and 4.1 of the Strategic Plan 2019-2027 are relevant |
| **15.7** Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products  | Direct | Section 2.1 (Legal measures) of the Action Plan specifically requires Parties to give legal protection for relevant waterbirds, and relevant International Single Species Action Plans address the issues of poaching and trafficking.Action Plan para 4.1.6, requiring Parties to ‘develop and implement measures to reduce, and as far as possible eliminate, illegal taking’, is especially relevant.Objectives 1.1 and 2.2 of the Strategic Plan 2019-2027 are relevant |
| **15.8** By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species | Direct | Article III.2g (General Conservation Measures) and Action Plan section 2.5 (Introductions) require Parties to prohibit the deliberate introduction, and take all appropriate measures to prevent the unintentional release into the environment of non-native species of animals and plants detrimental to waterbirds. This issue has been a major focus of attention with triennial reporting required of the Parties. Both Article III.2g and section 2.5 call for measures to control non-native species – such as predators – that have been already introduced. Paras 3.3, 4.3.10 & 4.3.11 of the Action Plan are also relevant |
| **15.9** By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts |  | Objectives 2.6, 3.3, 3.4, 3.5, 4.3 and 5.5 of the Strategic Plan 2019-2027 are relevant |
| **15.a** Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems | Direct | Actions to resource conservation actions for waterbirds and their habitats will also benefit other species, wider ecosystems and human communitiesObjective 5.6 of the Strategic Plan 2019-2027 is relevant |
| **15.c** Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities | Direct | Relevant International Single Species Action Plans address the issues of poaching and trafficking.AEWA is contributing to relevant international Task Forces convened by CMS on the illegal killing of birds and related issues, and leads the development of the Plan of Action, and Task Force, on bird trapping in Egypt and LibyaObjective 2.5 of the Strategic Plan 2019-2027 is relevant |
| **Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development** |
| **17.1** Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection |  | Objective 5.6 of the Strategic Plan 2019-2027 is relevant |
| **17.2** Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries |  | Objective 5.6 of the Strategic Plan 2019-2027 is relevant |
| **17.3** Mobilize additional financial resources for developing countries from multiple sources |  | Objective 5.6 of the Strategic Plan 2019-2027 is relevant |
| **17.6** Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism |  | Objective 5.1 of the Strategic Plan 2019-2027 is relevant |
| **17.8** Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology |  | Objective 1.4, 1.5 and 3.2 of the Strategic Plan 2019-2027 is relevant |
| **Capacity-building** **17.9** Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation | Direct | National development of capacity and expertise within developing countries for waterbird and wetland conservation will also contribute to wider attainment of SDGs. This is addressed in Article III.2i (General Conservation Measures) and paras 6.1 & 6.2 of the Action PlanObjectives 1.4, 1.5, 5.2 and 5.3 of the Strategic Plan 2019-2027 are relevant |
| **Systemic issues***Multi-stakeholder partnerships* **17.16** Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries  | Indirect | Multi-stakeholder partnerships, for example as involved in waterbird monitoring are crucial to waterbird conservation |
| **17.17** Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships | Direct | Effective implementation of AEWA critically depends on the development and nurturing of such partnerships |

1. The numbering of draft resolutions presented to MOP7 may change. [↑](#footnote-ref-1)
2. <https://www.nature.com/articles/nature25139> [↑](#footnote-ref-2)
3. <http://www.un.org/ga/search/view_doc.asp?symbol=A/70/L.1&Lang=E> [↑](#footnote-ref-3)
4. Resolution 10.18. Guidelines on the integration of migratory species into National Biodiversity Strategies and Action Plans (NBSAPs) and other outcomes from CBD COP10. <http://www.cms.int/sites/default/files/document/10_18_nsbaps_e_0_0.pdf> [↑](#footnote-ref-4)
5. <http://www.cms.int/sites/default/files/document/doc_27_guidelines_nbsap_e_0.pdf> [↑](#footnote-ref-5)
6. Particularly in the context of [Resolution 5.19](http://www.unep-aewa.org/sites/default/files/document/res_5_9_african_initiative_0.pdf). [↑](#footnote-ref-6)
7. #  2014. Analysis on pathways for the introduction of invasive Alien species: Updates. UNEP/CBD/COP/12/INF/10 <https://www.cbd.int/doc/meetings/cop/cop-12/information/cop-12-inf-10-en.doc>

 [↑](#footnote-ref-7)
8. For example at <https://www.ramsar.org/resources/ramsar-sites-management-toolkit> [↑](#footnote-ref-8)
9. <http://www.birdlife.org/datazone/userfiles/file/IBAs/MonitoringPDFs/IBA_Monitoring_Framework.pdf> [↑](#footnote-ref-9)
10. in the context of [Resolution 5.19](http://www.unep-aewa.org/sites/default/files/document/res_5_9_african_initiative_0.pdf) especially [↑](#footnote-ref-10)
11. <http://www.unep-aewa.org/en/node/1935> [↑](#footnote-ref-11)
12. <http://tinyurl.com/mpfm8a8> [↑](#footnote-ref-12)
13. <http://www.birdlife.org/content/caring-coasts-initiative#_edn2> [↑](#footnote-ref-13)
14. Resolution 10.18. Guidelines on the integration of migratory species into National Biodiversity Strategies and Action

 Plans (NBSAPs) and other outcomes from CBD COP10.

 <http://www.cms.int/sites/default/files/document/10_18_nsbaps_e_0_0.pdf> [↑](#footnote-ref-14)
15. <http://www.cms.int/sites/default/files/document/doc_27_guidelines_nbsap_e_0.pdf> [↑](#footnote-ref-15)
16. These are species for which significant conflicts with, for example, agriculture or fisheries have been identified in part of the Agreement Area. [↑](#footnote-ref-16)
17. As identified under Action 4.2.a [↑](#footnote-ref-17)
18. As established under Action 4.4.a. [↑](#footnote-ref-18)
19. Causes of unnecessary additional mortality and other key threats include: energy infrastructure (especially powerlines, wind turbines); illegal taking & killing; fisheries bycatch; and invasive alien species. [↑](#footnote-ref-19)
20. Examples of relevant multilateral processes include, but are not limited to, Agenda 2030, CBD, CMS, Ramsar Convention, Regional Fisheries Management Organisations (RFMOs), UNFCCC. [↑](#footnote-ref-20)
21. As identified under Action 4.2.a [↑](#footnote-ref-21)
22. Causes of unnecessary additional mortality and other key threats include: energy infrastructure (especially powerlines, wind turbines); illegal taking & killing; fisheries bycatch; and invasive alien species. [↑](#footnote-ref-22)
23. Examples of relevant multilateral processes include, but are not limited to, Agenda 2030, CBD, CMS, Ramsar Convention, Regional Fisheries Management Organisations (RFMOs), UNFCCC. [↑](#footnote-ref-23)
24. As identified in *Consolidated Report on the Subregional Gap Identification Workshops under the Wings Over Wetlands Project* WOW Technical Report 12, 2008. [↑](#footnote-ref-24)
25. ‘Priority’ populations are those listed in Column A, Categories 1(a) and 1(b), plus Column A populations marked with an asterisk, in Table 1 of the AEWA Action Plan. [↑](#footnote-ref-25)
26. Encompassing both international single-species and multi-species action plans (see Resolution 2.1) and international habitat action plans (see Resolution 5.2). [↑](#footnote-ref-26)
27. “Other populations in unfavourable conservation status” are those listed in Category 1 (c), Category 2 or Category 3 in column A or Category 2 in column B, in Table 1 of the AEWA Action Plan. [↑](#footnote-ref-27)
28. These are species for which significant conflicts with, for example, agriculture or fisheries have been identified in part of the Agreement Area. [↑](#footnote-ref-28)
29. As established under Action 4.4.a. [↑](#footnote-ref-29)
30. As established under Action 4.4.a. [↑](#footnote-ref-30)
31. National Biodiversity Strategies and Action Plans required under the Convention on Biological Diversity (CBD). [↑](#footnote-ref-31)
32. Recognising that implementation of AEWA contributes to implementation of Parties’ commitments under other MEAs, including CBD, CMS and Ramsar. [↑](#footnote-ref-32)
33. The Trilateral Waddensea Cooperation between Germany, Denmark and The Netherlands is a good example of such functional coordination [↑](#footnote-ref-33)
34. which must ensure sufficiently large, disturbance-free, areas for the survival of particularly sensitive species [↑](#footnote-ref-34)