

## **Eighteenth Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA 18) 23-27 June 2014- Montreal**

### **Agenda item 9.4: Progress on implementation of conservation and restoration**

*A proposal for the identification of areas of critical importance for ecosystem services in coastal and marine areas*

#### **Recommendation**

It is recommended that SBSTTA 18:

**Urge** Parties, other Governments and relevant organizations to expand their conservation efforts, to advance commitments under Aichi Target 11, to priority areas which enhance or sustain socio-economic benefits from marine and coastal ecosystems, specifically in areas close to human populations where threats may be high but where the potential ecosystem service benefits of protection to human well-being would be considerable;

**Request** the Executive Secretary, in collaboration with Parties, other Governments and relevant organizations:

- i. Explore options for developing guidance on the identification of areas of critical importance for ecosystem services to assist in prioritization of conservation and restoration efforts, complementing the important work in identifying areas of significance for biodiversity, within wider coastal and ocean management processes, and
- ii. Develop a proposal for global guidance to identify areas of critical importance for ecosystem services for consideration by the 13th meeting of the Conference of the Parties

**Invite** the Global Environment Facility and other donors to support this initiative.

#### **Summary of key points**

New language introduced in the CBD Strategic Plan and Aichi targets (2010) in relation to ecosystem services provides both challenges and opportunities for improving conservation outcomes whilst at the same time delivering essential benefits for society.

The implementation of Target 11 on protected areas necessitates that attention be given to multiple elements of the target including equitably and well-managed sites within a wider seascape and most importantly to the protection of ecosystem services. The Secretariat's report on national implementation of Target 11 highlights the limitations of simple metric of marine protected area coverage as a measure of progress. There is a clear need to develop global guidance and capacity to effectively protect ecosystem services.

Prioritization of protected areas is particularly challenging in marine settings where many areas are data deficient, however excellent progress has been made in describing areas meeting the criteria for ecologically and biologically significant marine areas (EBSAs), especially in open oceans and deep seas both within and beyond national jurisdiction. Comparative efforts are needed to describe areas of critical importance for ecosystem services (ACIES) in coastal and inshore areas where benefits such as coastal protection, food production, carbon sequestration, recreation are high and where threats to service provision are greatest. This will require additional global guidance including new criteria, methodologies and information.

## Background

The Convention on Biological Diversity (CBD) plays a primary role in charting directions and fostering action for improved ecosystem-based management approaches. The CBD Strategic Plan and Aichi targets (2010) stressed the importance of expanding conservation outcomes to deliver social, cultural and economic benefits to communities, and outlined new tools and a concept to achieve that goal. Of particular interest is the Aichi Target 11 which introduced a number of new elements compared to the previous Protected Area target, including the need for “*areas of particular importance for biodiversity and ecosystem services,*” ...to be.. “*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*” ... “*seascape*”.

### *Implementation of Aichi Target 11*

The CBD Secretariat’s report on issues in progress: ecosystem conservation and restoration shows:

- An increase of global coverage of marine protected areas, as a % percentage of territorial waters from 9.5% (2010) to 9.7 (2012) with 47 parties having 10% or more of their territorial waters protected.
- Initial work reported by Parties on the implementation of the elements of Target 11 indicate that some progress has been made on accounting for management effectiveness; equitable management; ecological representation and well-connected systems of MPAs; other effective areas based measures; and integration and connectivity into landscape and seascape. However progress on the consideration of ecosystem services has been slow.

Two important points emerge from the Secretariat’s report:

- Firstly, MPA coverage as a measure of progress needs further examination;
- Secondly, the implementation of new elements of Target 11 poses a number of challenges, most specifically on how to account for ecosystems services, indicating that global guidance and capacity in the identification of areas for importance for ecosystems services will be required for successful national implementation.

### *Beyond a numerical target as a measure of progress?*

Further analysis of MPA coverage shows, an increase of global coverage of marine protected areas (MPAs), as % of EEZ and equivalent waters from 3.2% (2010) to 7.1% (2012) with 28 parties having 10% or more of their EEZ protected, with large remote MPAs accounts for over 60% of the increase in coverage. If this trend continues, the numerical target of 10% will most likely be reached by 2020.

However the distribution of these sites will not provide the coverage of key components of the marine space as specified under Target 11. Of particular concern are the potential gaps in coverage in areas close to human populations. These areas are among the most important for ecosystem services, and are often under threat. Such areas are essential to achieve a representative network of well managed sites which protects both biodiversity and ecosystem services. These findings also raise the question on how best to account for other area based measures in protecting important areas for biodiversity and ecosystem services and whether a numerical target set at 10% is ambitious enough (Spalding et al, 2013).

### *Making the case for identification of areas of critical importance for ecosystems services*

Significant efforts have been made, supported by comprehensive global guidance on criteria and protocols, to identify and improve the protection and management of high biodiversity value marine and coastal ecosystems. Good progress has been made in describing areas meeting the criteria for ecologically and biologically significant marine areas (EBSAs) in open oceans and deep seas both within and beyond national jurisdiction. Comparative efforts are needed to describe areas of critical importance for ecosystem services (ACIES) in particular in coastal and inshore environments.

There is currently limited global guidance on how to identify priority areas for essential ecosystem services. The large array of potential ecosystem services can be daunting, and it must be recognized that not all such services are overlapping, or even complimentary. Even so, considerable efforts have been made to develop typologies of ecosystem services and efforts are now underway to develop models and maps showing the value of a number of key services.

One clear observation is that many ecosystem service values are closely linked to specific human benefits and uses. Biodiversity values, by contrast, are determined by a range of factors including evolutionary history, climate, geophysical and biological features, and can be measured in many different ways, including species richness, endemism and rarity. Overall, there is relatively little correlation between biodiversity in terms of species richness and human population density or human uses. If anything, endemism may in fact show some inverse correlation, given the importance of isolated and often remote islands or seamounts as places of high endemism (Roberts et al 2002; Allen 2008; Tittensor et al., 2010; Stuart-Smith et al 2013).

More importantly, there is a strong bias in selecting priority areas for biodiversity conservation away from areas of likely current or future human impacts, both on land (Joppa and Lucas 2009), and in the ocean (Devillers et al 2014, Spalding et al 2013). Such areas are not as subject to high demands for alternative uses,

and may cost less per unit area to declare and manage. Thus while there may be no direct link between biodiversity and the provision of ecosystem services, there is likely an inverse correlation between marine protected areas for biodiversity, and the provision of some ecosystem services which value depends on proximity to people. This is unfortunate not least because a marine protected area designation can help secure ecosystem services and provide very real economic and social benefits.

Global guidance and capacity in the identification of areas of critical importance for ecosystem services in coastal areas, will broaden the scope of priorities for conservation and restoration measures and strengthen the implementation of the CBD Strategic Plan and Aichi targets including Target 11 (protected areas), but also targets 14 and 15 and contribute to mainstreaming of conservation solutions for development and climate adaptation and mitigation.

### *A proposal for describing areas of critical importance for ecosystem services (ACIES)*

Elements of a process to identify areas of critical importance for ecosystem services could commence with two important steps:

1. Compilation of lessons learnt from new and existing initiatives on characterization, quantification and valuation of ecosystem services at the global, national and regional levels and application in marine spatial planning;
2. Convening of a global expert workshop to develop an approach, criteria and a protocol for assessment as well as information needs for the identification of areas of critical importance for ecosystem services.

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