## CANADA

## **CANADIAN INTERVENTION ON TARGET 15**

Canada supports the indicators for Target 15 but thinks that it would be useful to have additional indicators to measure the percentage of habitat degradation, as well as efforts to combat desertification.

In particular, we would suggest that an indicator to determine achievement of the 15% target be explored, possibly with GEO-BON or the FAO, because neither of the proposed indicators is an area indicator.

The paper correctly notes that better tools are needed to measure carbon storage and fluxes and to understand the interplay with biodiversity conservation; this should include in non-forest ecosystems and at local scales. There are important links between biodiversity and ecosystem resilience and functioning, including productivity and carbon storage – it would be useful to draw on the many existing case studies to develop concepts about successful approaches.

In our view, an important gap in the paper is the need to improve tools for remotely measuring carbon in terrestrial and aquatic ecosystems.

Canada believes that there is ample guidance to identify ecosystems that are vulnerable and that also maintain large carbon stocks. Such information is available on global above-ground biomass (AGB) carbon mapping, for instance on the WCMC REDD+ website. A 2008 Global Environment Centre publication on wetlands, "Assessment on peatlands, biodiversity and climate change" highlights the importance of peatlands in carbon storage and provides maps of deposits by depth.

With regard to the need to better map degraded ecosystems, we would highlight recent publications on ways of assessing forest degradation: *Ecology and Society 2013, Volume 18, Number 2, article 20;* and *FAO FRA Working Paper 177.* Both of these are part of the CPF-led effort to define forest degradation and provide information on measurement.

We would also highlight the 2012 IUFRO World Series publication Volume 31 on "Understanding the relationships between biodiversity, carbon, forests and people: the key to achieving REDD+ objectives". This publication has a section on scientific needs assessment, and provides guidance for forest ecosystem restoration, has policy statements, and will be of broad interest to Parties.

A couple of additional gaps to highlight are the lack of guidance on the prioritization of degraded habitats, and on the quantitative assessment of restoration performance. It is important to recognize that restoration can have a number of objectives including ecosystem services, habitat enhancement for species at risk, and carbon sequestration. Feasibility and impact should also be considered when determining priorities for restoration activities.

It is important to recognize that restoration is often ecosystem and situation-specific and that guidance needs to be adapted to local situations. Restoration projects should be conducted using adaptive management – that is with pre-defined targets and indicators, multiple trials to determine the best method of treatment, monitoring of results, and reporting.

Finally, as noted above, an element of this target is combating desertification and it would be useful to have a related indicator. Desertification is caused by the removal of vegetation and the

diversion of water for agricultural purposes, and restoring natural water flow, while not directly related to carbon storage, is an important part of restoration.

With regard to Canadian activities at the international level, Canada contributed to the development of a new guidance framework in collaboration with the IUCN, the CBD Secretariat, and others. This publication, which is part of the IUCN's best practice protected areas guideline series, directly supports the ecological restoration provisions of the CBD Programme of Work on Protected Areas.