Input from the Committee on Science and Technology on how best to measure strategic objectives 1, 2 and 3 of The Strategy

Note by the secretariat

Summary

By its decision 16/COP.10, the Conference of the Parties decided that the programme of work for the eleventh session of the Committee for the Review of the Implementation of the Convention (CRIC) should include an agenda item relating to the input from the Committee on Science and Technology (CST) on how best to measure progress made with respect to strategic objectives 1, 2 and 3.

The annex to the present document contains the progress report of the Ad Hoc Advisory Group of Technical Experts on impact indicator refinement as presented to the third special session of the Committee on Science and Technology (CST S-3) in document ICCD/CST(S-3)/L.4. It will be included in the final report of the CST.

The content of the annex to this document is to be presented by the Chair of the CST to the CRIC at its eleventh session for consideration by Parties.
Annex

Progress made in refining the impact indicators relating to strategic objectives 1, 2 and 3 of the 10-year strategic plan and framework to enhance the implementation of the Convention (2008–2018)

I. Introduction

1. By decision 17/COP.9, the Conference of the Parties (COP) requested the secretariat under the guidance of the Bureau of the Committee on Science and Technology (CST) and using an iterative process, to develop proposals for consideration by future sessions of the COP commencing with its eleventh session to refine the set of impact indicators and associated methodologies. The COP further requested the CST to review the status of this iterative process during its sessions and to recommend a minimum set of impact indicators for consideration by the COP at its eleventh session.

2. By its decision 19/COP.10, the Conference of the Parties decided to establish an ad hoc Advisory Group of Technical Experts (AGTE), to be tasked with continuing the iterative participatory contribution from the scientific community, national focal points (NFPs) and science and technology correspondents (STCs) on impact indicator refinement and the monitoring and assessment of impacts.

3. The CST took note of progress made in establishing the AGTE and refining the set of impact indicators between COP 10 and mid-October 2012 as contained in document ICCD/CST(S-3)/5 and Corr.1.

4. The CST also took note of further progress made from mid-October 2012 to the end of March 2013 as presented by the Chair and the editorial team of the AGTE as a verbal update during the third special session of the CST (CST S-3). The AGTE representatives outlined the main findings of their work and presented a summary of their preliminary recommendations as contained in the annex to this document.

5. A complete version of the AGTE preliminary recommendations was submitted to all NFPs and STCs by the United Nations Convention to Combat Desertification (UNCCD) secretariat at the beginning of April 2013 for their review. Parties were encouraged to provide their comments to the AGTE on these recommendations by 5 May 2013.

---

1 This set of impact indicators was preliminarily accepted as contained in annex I to decision 17/COP.9 and refined through a scientific peer review process as contained in document ICCD/COP(10)/CST/2.
II. Summary of the preliminary recommendations of the ad hoc Advisory Group of Technical Experts on impact indicator refinement

6. At the third special session of the Committee on Science and Technology (CST S-3), the Chair and the editorial team of the AGTE presented a verbal update on progress made in the refinement of the set of impact indicators to the CST. The AGTE representatives outlined the main findings of their work and presented a summary of their preliminary recommendations.

7. While recalling that the set of impact indicators is intended to enable Parties to track progress in implementing the United Nations Convention to Combat Desertification (UNCCD) against its strategic objectives 1, 2 and 3, the AGTE noted that it is impossible to fully meet the three strategic objectives at the same time since they compete among themselves. This competitive nature calls for setting up a trade-off between the economic, social and environmental components. The AGTE also noted the emergence of a second kind of trade-off: striking a balance between local versus global concerns, for example in sustainable land management.

8. The AGTE recommended using the term ‘progress indicators’ rather than ‘impact indicators’ for tracking progress in implementing the UNCCD against its strategic objectives. This would help avoid confusion with the use of the word ‘impact’ in the driving force-pressure-state-impact-response (DPSIR) causal chain.

9. The AGTE recommended the pursuit of harmonization, with potential for standardization when appropriate and feasible, to account for the variability in the causes and consequences of dryland degradation among country Parties and in their capacities to measure, monitor and evaluate impact.

10. The delineation and diagnostics of affected areas are a precondition to tracking progress in implementing the UNCCD and yielding invaluable information for implementing successful mitigation programmes at both country and global level. The AGTE recommended distinguishing between the following categories of affected and threatened areas: potential areas (where desertification is climatically possible); areas at risk (where climatic and socioeconomic drivers converge); areas actually threatened (where desertification is currently impairing the human-land system); and areas with inherited desertification (where drivers are no longer active).

11. The AGTE recommended a three-layered approach for identifying the different categories of affected areas. Climatic drivers come first, which form the outer layer and provide the basis for delineating potentially affected areas. The AGTE recommended to focusing on drylands and using the aridity index as the best candidate for defining the dryland area within the accepted UNCCD definition (arid, semi-arid and dry sub-humid areas). Socioeconomic drivers form the second layer. Data on rural population trends are widely available and could be used as an integrative indicator for this layer. The overlap between both driver layers highlights the hotspots, or areas at risk of being affected, and should form the third layer. These hotspots should be further qualified through additional information on land cover decline along with ground inspections. This could assess whether hotspots are only at risk of being affected whether they are already (actually) affected by desertification. Finally, positive values of the climatic layer overlapping with negative values of human pressure define the field of inherited desertification.

12. The AGTE recommended that the provisional set of progress indicators initially proposed in decision 17/COP.9 and refined in decision 19/COP.10 (referring to
ICCD/COP(10)/CST/2 (section II.B)) should be further refined to produce a minimum set, as listed in the table below. The proposed set of common global indicators is a mixture of indicators for which metrics/proxies are available globally (e.g. change in land cover status) as well as indicators for which the coverage of reporting is limited (e.g. the Global Wild Bird Index) or metrics/proxies are currently lacking (e.g. change in land productivity). Therefore, a combination of using data from existing channels/initiatives and foreseeing incentives for additional monitoring will be needed. In this work, synergies with monitoring and evaluation (M&E) processes under other Rio Conventions should be activated and/or maintained.

Table
**Proposed refinements to the minimum set of provisionally adopted impact indicators for strategic objectives 1, 2 and 3 from The Strategy**

<table>
<thead>
<tr>
<th>Strategic Objective 1: To improve the living conditions of affected populations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty rate/relative income (including a rural component)</td>
</tr>
<tr>
<td>Water availability (including human and animal access)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategic Objective 2: To improve the condition of affected ecosystems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in land cover status</td>
</tr>
<tr>
<td>Change in land productivity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategic Objective 3: To generate global benefits through effective implementation of the UNCCD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in soil organic carbon stock/total terrestrial system carbon stock</td>
</tr>
<tr>
<td>Trends in abundance and distribution of selected species, in particular in the Global Wild Bird Index</td>
</tr>
</tbody>
</table>

13. In order to ensure that country Party reporting reflects not only global but also national and local realities, the AGTE recommended that the minimum set of globally harmonized progress indicators be systematically complemented by regionally, nationally, and/or locally relevant information and indicators (‘narrative’ indicators).

14. Narrative indicators can be drawn from local storylines, i.e. documented histories of successes and failures experienced by a particular site threatened by DLDD processes. In addition to feeding indicators into global reporting, storylines can also provide the information and knowledge base for understanding local DLDD processes.

15. The AGTE recommended that indicators at across spatial scales (regional, subregional, national, sub-national, local) should comply with a set proposed quality specifications, such as the e-SMART criteria.

16. The selection and identification of indicators should be supported by a conceptual model to describe meaningful causal interactions. The AGTE recommended building a modified DPSIR framework with explicit links to the three strategic objectives and in which human and environmental impacts can be distinguished. This modified framework could be provisionally named ‘Driving Force – Pressure – State – human and environmental Impact – Response framework (DPSheIR). The DPSheIR would be an evolving and adaptive, monitoring and evaluation-oriented framework that enables, inter alia, the evaluation of the degree of implementation of the strategic objectives and best policies to cope with DLDD in affected countries. The DPSheIR can be used for reporting
at multiple scales, particularly when focusing on policy evaluation, while the actual population of the framework with indicators could also be scale, location and purpose-specific.

17. The AGTE further recommended that the full understanding of the underlying system dynamics and functions be enabled by a System Dynamics-based Understanding of Desertification Processes framework (SDUDP). The SDUDP development will rely on two pillars: the available systemic knowledge about the dynamics of desertification and the new findings from local storylines. Storylines should ideally provide the information required to understand the dynamics of DLDD processes. Building and continuously updating storylines at representative hotspots and coldspots in each country is emerging as the main source of local information (documentation and ground survey) which can be shared between country Parties and used in global assessments.

18. The AGTE noted that the full integration of local and national M&E efforts into the global UNCCD progress assessment would require engagement with a wide range of relevant local stakeholders from the start of the process. This could be promoted by making indicator selection and reporting part of larger community development planning (CDP) efforts and associated decision-making. Indicator selection and associated reporting requirements should be integrated into project financing guidelines and capacity-building measures should be planned where needed.

19. The AGTE recommended that the national action programme alignment process includes the development of an appropriate M&E framework to facilitate the integration of local/national information and indicators into global progress assessments and M&E.

20. Considering that technical, logistical and scientific issues make the aggregation of indicator data from local to global scale challenging, the AGTE recommended the use of a common integration protocol for upscaling indicators, with the national level responsible for identifying sites, systematically gathering the storylines coming from local M&E that are required to understand the dynamics of DLDD, and generalizing this information at national, subregional, regional and global levels.

21. The AGTE noted that the successful implementation of indicators, the conceptual integration framework and the M&E/reporting mechanism as formulated in these recommendations would require a broad, practical capacity-building programme and may even require an update of the existing reporting procedure. The AGTE recommended that methods, mechanisms and conceptual frameworks and indicator sets proposed be tested and regularly re-evaluated to assess the feasibility of the evolving M&E approach.