



Montpellier, 9<sup>th</sup> of January 2009

Dear colleagues of EDN network,

UNCCD adopted a 10-year strategic plan and framework during the eighth session of the Conference of the Parties (COP 8) in Madrid (September 2007). Many of the decisions made during COP 8 refer to indicators that should be developed to enable: (i) decision makers to assess the implementation of this strategy and progress achieved on its operational objectives, (ii) drawing up of national and regional reports, and (iii) estimation of soil degradation and desertification trends, progress achieved through local projects, the impact of public policies, etc., at various scales.

The scientific community was asked to underpin the work of CST to help it draw up proposals that will be put forward at COP9 in 2009. Prior to this, an intersessional CST meeting and a CRIC session were held in November 2008 at Istanbul. Regional scientific meetings will also be held during 2009. CST9 will be held (probably in October 2009 in Geneva) in the form of an international scientific conference that will rule on proposals from the scientific community. This conference will be organized by a selected consortium (DSD, Dryland Science for Development) of which European DeserNet is part of. In addition, the CST Bureau should undertake the selection of a minimum set of indicators for the COP9 in 2009. The final goal is to produce a really simple output in order to reach an agreement between Parties. This has to be ready in July 2009.

Within this framework, the French Scientific Committee on Desertification (CSFD) is currently working on a first proposal of indicators at various levels. The spirit of this work is not strictly scientific since it targets decision makers. The messages should be simple and the results useful.

After three working meetings of the CSFD in 2008, a first working list has been established taking into account the main existing indicators from literature (see literature references listed in appendix) as well as statistics and databases on international organization websites. In addition, members of the CSFD Working Group made several conclusions leading our current work (see in appendix 1).

The final output should be a list of indicators with, as far as possible, the following information: definition, units, spatial and temporal scales of validity, UNCCD strategic objective, main users, methodology, cost, interpretation (thresholds, benchmarks, contextualization...), data availability and references.

In that context, the CSFD has proposed four lists of indicators complemented with some of the above information:

- **National data for country characterization.** These data are available in any national statistic agencies.
- **National or sub-regional indicators** classified according to the UNCCD objectives<sup>1</sup> (Type 1 [S1 to S9] and Type 4) and by main items.
- **Local indicators** that are relevant to assess local situations and are based mainly on field works.

---

<sup>1</sup> Type 1 (S1 to S9): Indicators for global assessment of the fulfilment of strategic objectives; Type 4: Indicators that can be used by decision makers to estimate trends at different scales.

- ***Significant trend indexes gathering indicators.*** These indexes are complex and are meant to assess situations and trends.

During the CST intersessional session held in Istanbul in November 2008, the CSFD President and several members of EDN advisory board agreed upon a possible cooperation on that matter. This cooperation has been approved in late November upon an email exchange between CSFD and EDN steering Committee.

***On behalf of CSFD, as the President, I think these first working lists of indicators would greatly benefit from the advices of EDN members.*** This work could lead to a common output of the European Region that could feed the UNCCD process. ***As we are also member of the DSD consortium, I think that it is very important that we create solid input of our work into the DSD process.*** This would underline our major aim to create synergies and not redundancies in action.

In that context, the CSFD Working Group is pleased to share with you its current indicators' working lists for acknowledgment, proposal and input. These working lists are presently downloadable from EDN website.

After having received and integrated your comments on the attached lists, we will organize a common CSFD/EDN meeting in order to synthesize your comments (probably mid March 2009, location TBA). We will also provide this synthesis to the coordinator of the DSD consortium, Mark Winslow. It has been clearly stated by CST that the DSD has to interact with regional meetings. As members of all processes I can guarantee a stable interaction between EDN, DSD and the CST Bureau.

The roadmap for EDN cooperation and the inflow of information into the DSD consortium and the CST Bureau is the following:

1. EDN Bureau sends the working list of indicators complemented with the ToRs to EDN members for advices (January 2009);
2. EDN/CSFD working group analyses and synthesizes comments from EDN members (March 2009);
3. The final output will be a consolidated list of indicators:
  - 3.1. This list will be proposed to the CST bureau through the WEOG CST Vice-President (Richard Escadafal) (End of March 2009)
  - 3.2. This list will also be proposed to the DSD Consortium for the preparation of the scientific style conference of the CST 2009 (End of March 2009).

On behalf of the CSFD and of EDN, I would greatly appreciate your active collaboration on that important matter.



**Prof. Dr. Marc Bied-Charreton**  
**President of CSFD**

**Comité Scientifique Français de la Désertification**  
Agropolis, avenue Agropolis  
34394 Montpellier Cedex 5, France  
[www.csf-desertification.org](http://www.csf-desertification.org)

**Contact: Isabelle Amsallem, CSFD Scientific Writer, [amsallem@agropolis.fr](mailto:amsallem@agropolis.fr)**

## Appendix 1 - Summary of the main conclusions of CSFD working group on indicators

Members of the CSFD Working Group noted that:

- **The indicators are not just ‘raw’ figures.** They are involved in environmental, historical and institutional settings. **The indicators thus have spatiotemporal validity limits, so their significance is not necessarily universal.** Universal signs and symbols of land degradation and successes of the desertification combat might not exist.
- Because of the previous point, **the list of indicators is not definitively set** and could change with time.
- **The indicators are aimed at measuring changes** such as improvements (or not) in conditions for local inhabitants. Two steps are required when defining an indicator: **(i) to define the individual and combined variables considered** in order to obtain an all-encompassing indicator of an important factor (e.g. level of well-being of inhabitants) at a given time (status indicator), and in a given area (e.g. village area), and **(ii) to measure and interpret changes in indicator values.** This involves the interval between measurements, the significance of observed variations, trend analysis and finally diagnosis.
- **The indicators should be implemented with caution** because there is a risk of completely contradictory interpretations (e.g. an increase in the number of motor-driven pumps could be interpreted as a sign of development or, conversely, as a desertification factor).
- Statistics are available in all international and national data repositories that could be considered as ‘indicators’, especially when long-term patterns are considered; however, the ways these statistical data have been collected are often questionable. **The Working Group will put forward proposals on these statistics.**
- Indicators obtained from ‘physical’ measurements are more objective than those developed from socioeconomic surveys. There are still methodological difficulties to overcome with respect to cross-tabulating remote-sensing data with data concerning people and societies.
- Many themes have received less research attention than the biophysical aspects (e.g. soils). Further research would thus be required (biodiversity, poverty indicators, etc.).
- Training on the use of the indicators should be considered.

The Working Group reviewed existing or on going indicators from development or research programs (research institutions, international organizations, United Nations, ...) as well as statistics and databases on international organization websites (FAO, UNEP, UNDP, WB, etc.).

The working group has proposed a minimum set of national statistics, national or regional indicators clustered within several themes, local indicators essentially collected from field surveys as well as significant trend indexes gathering indicators.

Concerning the current work output:

- The indicators should be **‘contextualized’** from a spatial, temporal (historical) and institutional standpoint.
- They should be presented with their validity limits, a method, feasibility and cost.
- It would also be interesting to develop indicators on decentralization within countries.

## **Appendix 2 - Terms of Reference**

### **EDN/CSFD contribution to a European proposal of a minimum set of indicators for the UNCCD 10 year Strategy**

UNCCD adopted a 10-year strategic plan and framework during the eighth session of the Conference of the Parties (COP 8) in Madrid (September 2007). Many of the decisions made during COP 8 refer to indicators that should be developed. The scientific community was asked to underpin the work of CST to help it draw up proposals that will be put forward at COP9 in 2009. Regional scientific meetings will also be held during 2009. CST9 will be held in the form of an international scientific conference that will rule on proposals from the scientific community.

Within this framework, the French Scientific Committee on Desertification (CSFD) has started to work on a first proposal of indicators at various levels. A first working list has been established by the CSFD at the end of 2008 taking into account the main existing indicators found in the literature and the main international organizations websites. This list is divided into four sub-lists as follows:

- ***National data for country characterization.*** These data are available in any national statistic agencies.
- ***National or sub-regional indicators*** classified according to the UNCCD objectives<sup>2</sup> (Type 1 [S1 to S9] and Type 4) and by main items.
- ***Local indicators*** that are relevant to assess local situations and are based mainly on field works.
- ***Significant trend indexes gathering indicators.*** These indexes are complex and are meant to assess situations and trends.

In this scope, starting from the four current CSFD lists of indicators available on EDN website, **it is asked to each EDN member to:**

1. Review these initial lists
2. Validate (or not) each of these proposed indicators
3. Prioritize those indicators
4. Complement these lists with missing relevant indicators
5. Complement the literature references with relevant missing ones

This preliminary work will lead to a common EDN/CSFD working group. The final outcome will be a consolidated list of indicators as a contribution to the CST Scientific Conference and CST9. This list of indicators will be complemented as far as possible with the following information: definition, units, spatial and temporal scales of validity, UNCCD strategic objective, main users, methodology, cost, interpretation (thresholds, benchmarks, contextualization...), data availability and references.

CSFD will carry out responses' gathering and moderate EDN/CSFD specific working group set up for this duty.

**Dead line: 27th of February 2009**

**Contact: Isabelle Amsallem, CSFD Scientific writer, [amsallem@agropolis.fr](mailto:amsallem@agropolis.fr)**

---

<sup>2</sup> Type 1 (S1 to S9): Indicators for global assessment of the fulfilment of strategic objectives; Type 4: Indicators that can be used by decision makers to estimate trends at different scales.

### **Appendix 3 - The different types of indicator according to UNCCD**

#### **T1: Type 1 - Global indicators for assessment of the implementation of strategic objectives**

*Strategic objective 1: to improve the living conditions of affected populations*

- S1: decrease in numbers of people impacted by desertification/land degradation and droughts
- S2: increase in numbers of people living above poverty line
- S3: decrease in numbers of people below the minimum level of dietary energy consumption in affected areas

*Strategic objective 2: to improve the condition of affected ecosystems*

- S4: decrease in affected areas
- S5: increase in net primary productivity

*Strategic objective 3: to generate global benefits through UNCCD*

- S6: increase in carbon stocks in affected areas
- S7: areas of forest, agricultural and aquaculture under sustainable management

*Strategic objective 4: to increase available funds for combating desertification and drought adaptation*

- S8: increase in available funds
- S9: development of policies addressing desertification

#### **T4: Type 4 - Indicators for decision-makers, enabling the assessment of trends, success and failures at different scales**

## Appendix 4 - Bibliography \_ January 2009

Anonyme (nd). Annex II - Questions relating to proposed indicators of the operational objectives of the strategy (as contained in ICCD/COP(8)/10/Add.2). European contribution. 30 pp. Available in electronic format.

Anonyme (n.d.). EU comments and answers. Working paper. 25 pp.

Anonyme (n.d.). Guide méthodologique pour l'étude Sahel sur l'impact de la gestion des ressources naturelles. 44 pp.

Anonyme (2007). Expert Meeting - Monitoring, Targets and Indicators for strategic and operational objectives of the UNCCD Ten-Year Strategic Plan 2008 – 2018: Follow-up steps and new developments required at EU level, 27th November 2007 - Portuguese REPER. Brussels, EU WPIEI Desertification Group. 8 pp.

Anonyme (2008). Brief Status Report on Indicator Development for the GEF Focal Area Land Degradation (Desertification and Deforestation). 7 pp. Available in electronic format.

Anonyme (2008). Elements for an EU roadmap to support the “10-year strategic plan and framework to enhance the implementation of the Convention”. 12 pp.

Anonyme (2008). Land degradation Indicator Profiles for the KM: Land Project, CIESIN, Columbia University. 33 pp. Available in electronic format.

Bai, Z.G., Dent D.L. et al. (2008). Global Assessment of Land Degradation and Improvement. 1. Identification by remote sensing. GLADA Report 5. LADA, ISRIC, FAO. 69 pp. Available in electronic format.

Brabant, P. (2008). Evaluation et cartographie de l'état de dégradation des terres résultant des activités humaines. Indicateurs et indices. IRD. (Extraits de l'ouvrage), IRD. France.

Carrière, M. and B. Toutain (1995). Utilisation des terres de parcours par l'élevage et interactions avec l'environnement. Outils d'évaluation et indicateurs. Centre de Coopération Internationale en Recherche Agronomique pour le Développement/Département d'Elevage et de Médecine vétérinaire (CIRAD-EMVT). Maisons-Alfort, France. 95 pp. Available in electronic format.

Cirad (2003). Elevage et pauvreté. Actes de l'Atelier Cirad Montpellier, 11 et 12 septembre 2003. Eds. Guillaume Duteurtre et Bernard Faye. 201 pp. Available in electronic format.

CST (2008). Comment mesurer les objectifs 1, 2 et 3 du Plan stratégique décennal de l'UNCCD. Bonn. 19 pp. Available in electronic format.

CST (2008). Provisional draft four-year work plan (2008-2011) of the UNCCD Committee for Science and Technology. Bonn, 12 pp.

Eau Vive (2008). Liste d'indicateurs utilisés dans les projets pour apprécier les actions LCD et leurs effets. Communication personnelle de Christian Houdus d'Eau Vive à Marc Bied Charretton (email) le 09 octobre 2008. 1 pp. Available in electronic format.

Enne, G. and C. Zucca (n.d.). Desertification indicators for the European Mediterranean region. State of the art and possible methodological approaches. ANPA, NRD. Italy. 257 pp.

FAO (2003). Data sets, indicators and methods to assess land degradation in drylands. Report of the LADA e-mail Conference 9 October – 4 November 2002. Food and Agriculture Organisation of the

United Nations. Rome. 106 pp. Available in electronic format.

GNUP (2005). Indicateurs pour le suivi des progrès accomplis dans la réalisation des objectifs du Millénaire pour le développement. Groupe des Nations Unies pour le Développement, New York. 116 pp. Available in electronic format.

ICIS and MedAction (2001). Factors, actors, sectors and indicators. The concepts and application in MedAction. MedAction Deliverable #1. Maastricht. 30 pp. Available in electronic format.

Ickowicz A., Ancey V., Leclerc G., Touré I., Damman G., Darly S. (2005). Programme LEAD Livestock environment and development. Pastoralisme et environnement au Sahel. Rapport final, Crad Emtv, PZPS, LEAD. 105 pp. Available in electronic format.

Kusserow, H. (2006). Comments on possible contributions of European research projects and international initiatives working in the field of desertification monitoring for the operationalisation of indicators for the UNCCD 10-years strategy. Berlin. 15 pp. Available in electronic format.

Laxén J., Kaarakka V., et al. (2008). The role of science institutions in the implementation of the UN Convention to combat desertification (UNCCD), Viikki Institute of Tropical Resources (VITRI), Ministry for Foreign Affairs of Finland/Department for Development Policy, Unit for General Development and Policy. 47 p. Available in electronic format.

Ministerio, de Medio Ambiente (2006). Informe sobre el programa de accion nacional contra la desertificacion. España. 64 pp. Available in electronic format.

Ministry of environment and Spanish focal point (2008). Spain's experience in the field of desertification indicators: 2 pp. Available in electronic format.

Nations Unies (2007). Objectifs du millénaire pour le développement. Rapport 2007. New York. 36 pp. Available in electronic format.

OSS (en cours). Changements environnementaux et fonctionnement des écosystèmes Circum-Sahariens. Indicateurs écologiques, désertification et biodiversité dans Roselt/Oss. Projet de note introductive n° 4. En cours de publication.

OSS (n.d.). Le suivi évaluation. Des tableaux de bords au service de la gestion durable des ressources naturelles. Fiches. Tunis.

OSS (nd). Surveillance environnementale à long terme en réseau circum-saharien: kit minimum d'indicateurs Climat. 21 pp. Available in electronic format.

OSS (nd). Surveillance environnementale à long terme en réseau circum-saharien: kit minimum d'indicateurs Faune. 10 pp. Available in electronic format.

OSS (nd). Surveillance environnementale à long terme en réseau circum-saharien: kit minimum d'indicateurs Flore - végétation. 12 pp. Available in electronic format.

OSS (nd). Surveillance environnementale à long terme en réseau circum-saharien: kit minimum d'indicateurs socio-économie. 15 pp. Available in electronic format.

OSS (nd). Surveillance environnementale à long terme en réseau circum-saharien: kit minimum d'indicateurs sol et eau. 4 pp. Available in electronic format.

OSS and CILSS (2001). Suivi, évaluation. Indicateurs d'impact et de mise en oeuvre des programmes d'action de lutte contre la désertification. Concepts et expériences en Afrique, Asie et Amérique

Latine. 5ème Conférence des parties de la CCD. Genève, 1-12 octobre 2001. 33 pp. Available in electronic format.

OSS, Ministère de l'agriculture et des ressources hydrauliques, et al. (n.d.). Concepts et approche méthodologique d'élaboration des outils du suivi-évaluation du PAN/LCD. Le tableau de problématisation de la désertification. La grille des indicateurs et tableau de bord de la LCD. Applications au cas de la Tunisie. Tunis, 42 pp.

OSS. 2008. La surveillance à long terme en réseau circum-saharien : l'expérience ROSELT/OSS. Collection Synthèse n°3. Tunis. 100 pp.

OSS, IRD, et al. (2008). Un système d'information nature/société à l'échelle locale (SIEL) au service des observatoires environnementaux pour le développement durable. Le SIEL et son application en zones rurales à forte contrainte de sécheresse dans le réseau ROSELT. DRAFT. 24 pp. Available in electronic format.

OSS, ROSELT, et al. (2008). Surveillance environnementale à long terme en réseau circum-saharien : synthèse Afrique du Nord "Flore – végétation – occupation des terres". Draft. 65 pp. Available in electronic format.

OSS, ROSELT, et al. (2008). Synthèse régionale socio-économique Afrique du Nord et de l'Ouest. Draft. 30 pp. Available in electronic format.

PNUE and Plan d'action pour la Méditerranée (n.d.). Stratégie méditerranéenne pour le développement durable. Rome. 68 pp. Available in electronic format.

Requier-Desjardins, M. and M. Bied-Charreton (2002). Indicateurs - Extrait du rapport « Désertification et environnement mondial, proposition d'indicateurs pour un projet de développement, l'IREMLCD », CSFD/Université de Versailles Saint Quentin en Yvelines (C3ED)/FFEM, France. 14 pp. Available in electronic format.

ROSELT and OSS (2004). Conception, organisation et mise en oeuvre de ROSELT / OSS. Document scientifique n°1. 110 pp.

ROSELT and OSS (2004). Concepts et méthodes du SIEL - ROSELT / OSS. Système d'information sur l'environnement à l'échelle locale. Document scientifique n°3. 69 pp.

ROSELT and OSS (2004). Fiches techniques pour la construction de quelques indicateurs écologiques ROSELT / OSS. Contribution technique n°14. 69 pp.

ROSELT and OSS (2004). Indicateurs écologiques ROSELT/OSS. Une première approche méthodologique pour la surveillance de la biodiversité et des changements environnementaux. Document scientifique n°4. Montpellier, France. 50 pp.+annexes. Available in electronic format.

ROSELT and OSS (2005). Guide ROSELT/OSS pour l'évaluation et le suivi des pratiques d'exploitation des ressources naturelles. Contribution technique n°2. 133 pp.

ROSELT and OSS (2007). Methodological guide for the study and monitoring of flora and vegetation. Technical contribution n°1. 155 pp.

Terrafrica and FAO (2008). Instrument de soutien au pays en vue de l'intégration et de la mise à l'échelle de la gestion durable des terres en Afrique subsaharienne. Usage interne.

UN (nd). Indicators of sustainable development: guidelines and methodologies. Methodology sheets. United Nations, New York. 393 pp. Available in electronic format.

UN (2006). Report - Expert meeting group meeting on indicators of sustainable development. United Nations, Department of economic and social affairs, Division for sustainable development, New York. 18 pp. Available in electronic format.

UN (2007). Indicators of sustainable development: Guidelines and methodologies. Economic and Social Affairs, New York. 91 pp. Available in electronic format.

UNEP (2005). GEO Data Working Group Meeting Report. Geneva, 16-17 June 2003. UNEP/DEWA/RS-04-4, Nairobi. 24 pp. Available in electronic format.

UNEP (2006). GEO Year Book. An overview of our changing environment 2006. Nairobi. 91 pp. Available in electronic format.

UNEP and UN (2004). Convention on biological diversity. Provisional global indicators for assessing progress towards the 2010 biodiversity target. 26 pp. Available in electronic format.

Vlek, P., Bao Le Q., et al. (2008). Land decline in Land-Rich Africa. A creeping disaster in the making. CGIAR and ZEF. Bonn. 55 pp. Available in electronic format.