



## A/R methodological Tool

### “Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities”

(Version 01)

#### I. SCOPE

This tool provides a procedure for the identification of degraded or degrading lands for the purpose of application of A/R CDM methodologies. The definitions of degraded and degrading lands are meant to be applied exclusively in the context of A/R CDM project activities, therefore, they may not necessarily be consistent with other uses of the terms in other contexts.

#### II. APPROACH

The approach used by this tool relies on a progression of requirements of documented evidence of degradation, from the simplest case consisting of using existing documented local, regional, national or international land degradation classification, to the situation where visual observation of selected degradation indicators and/or participatory rural appraisal to demonstrate that the land is degraded, are required. The approach is based therefore on two stages depending on the availability of documented information and data on degradation. The logical procedural sequence is illustrated in figures 1a, 1b and 1c, displayed in Appendix 1. The approach can be described as follows:

Stage 1: This stage involves an initial screening of lands to determine whether the area has been classified as “degraded” under any verifiable local, regional, national or international land classification system<sup>1</sup> or credible study produced within the last ten years. If so, the lands should be considered as “degraded” and/or likely to be “degrading”. If the classification of “degraded” is older than ten years the land is considered as “degraded” and/or likely to be “degrading” if the drivers (natural or anthropogenic) and pressures that led to the land becoming degraded are still present, and there are no or insufficient management interventions to reverse degradation.

Stage 2: This stage involves lands for which there is no documented verifiable local, regional, national or international land classification designating them as “degraded” and/or “degrading” and for which evidence must be provided to demonstrate that the area is “degraded” and/or “degrading”. The demonstration of degradation is carried out by either:

- (a) By direct visual field evidence of selected indicators of land degradation and/or the results of a verifiable participatory rural appraisal (PRA); or
- (b) A comparison of candidate lands to degraded lands under similar ecological conditions and socio-economic and land use drivers.

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<sup>1</sup> For example, FAO (2008) National Soil Degradation Maps  
<<http://www.fao.org/landandwater/agll/glasod/glasodmaps.jsp>>  
ISRIC (2008) Global Assessment of Human-induced Soil Degradation (GLASOD):  
<<http://www.isric.org/UK/About+ISRIC/Projects/Track+Record/GLASOD.htm>>  
FAO-UNEP (2008) Land Degradation Assessment in Drylands (LADA):  
<<http://lada.virtualcentre.org/pagedisplay/display.asp?section=description>>



### III. PROCEDURE

The procedure to implement the two-stage approach is described below. The presence of one of the following is enough for demonstrating that land is “degraded” and/or “degrading”:<sup>2</sup>

- (a) Provide documented evidence that the area has been classified as “degraded” under verifiable local, regional, national or international land classification system or peer-review study, participatory rural appraisal, satellite imagery and/or photographic evidence in the last 10 years. If the documented evidence of degradation is older than ten years then:
  - (i) Provide evidence that the natural or anthropogenic degradation drivers and pressures that led to the land becoming “degraded” are still present and/or that there are no insufficient land management interventions to reverse degradation.
- (b) Demonstrate through a comparative study that the candidate lands in the proposed project area have similar or equivalent conditions (e.g. vegetation, soil, climate, topography, altitude, soil class and land use) and socio-economic pressures and drivers of degradation to reference degraded lands elsewhere, verifiably classified and documented as degraded lands. The proof of similarity of lands should be made through verifiable documentation and/or visual field assessment and data sets:
- (c) Demonstrate through direct evidence based on selected indicators of land degradation that the area is “degraded” and/or “degrading” through conducting either a visual assessment of the state and condition of the indicators or a verifiable participatory rural appraisal (PRA). The indicators of degradation should be locally relevant and verifiable. Candidate lands shall be declared as “degraded” and/or “degrading” if they show at least one of the following:
  - (i) The severity and extent of soil compaction and soil erosion, as determined by the presence of: reductions in topsoil depth (as shown by root exposure, presence of pedestals; exposed sub-soil horizons or armour layers); gully, sheet or rill erosion, landslides, or other forms of mass-movement erosion;
  - (ii) Decline in organic matter content and/or recession of vegetation cover as shown by reduction in plant cover or productivity due to overgrazing or other land management practices, thinning of topsoil organic layer, scarcity of topsoil litter and debris (GPS and photo evidence should be provided);
  - (iii) Presence of plant species locally known to be related to the condition of degradation of the land or field/lab tests showing nutrient depletion (e.g. reduced growth, leaf loss, desiccation, leaf chlorosis), salinity or alkalinity, toxic compounds and heavy metals;
  - (iv) A reduction in plant cover or productivity due to overgrazing or other land management practices.

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<sup>2</sup> The criteria that follow may be applied at the project, parcel or individual stratum level, as appropriate.



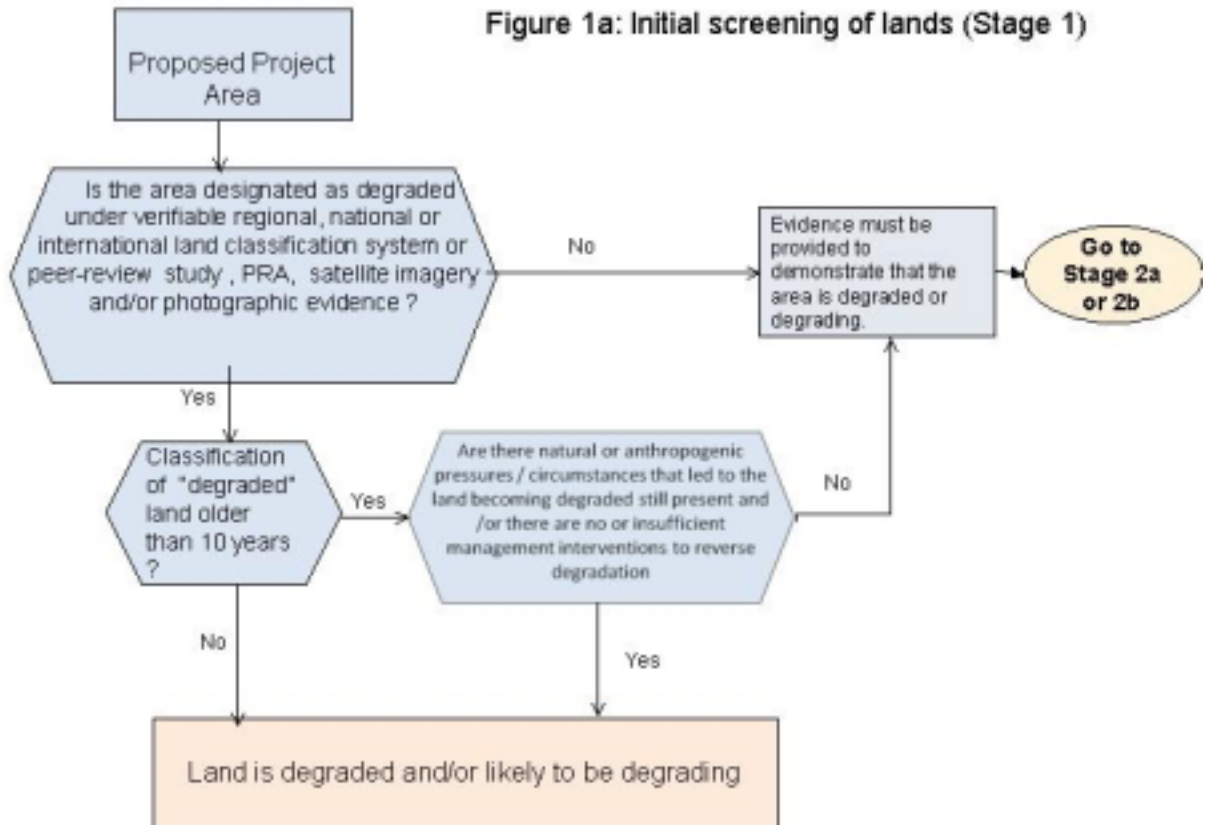
#### IV. REFERENCES AND ANY OTHER INFORMATION

1. Ponce-Hernandez, R. and P. Koohafkan (2004) Metodological framework for land degradation assessment in drylands .LADA Virtual Centre, FAO, Rome.  
(<ftp://ftp.fao.org/agl/agll/lada/LADA-Methframwk-simple.pdf>)
2. FAO/UNEP (2008) The Land Degradation Assessment in Drylands (LADA) Project. FAO, Rome: <<http://lada.virtualcentre.org/pagedisplay/display.asp>>
3. FAO/UNEP (2008) Land Degradation Assessment in Drylands local assessment (LADA-L) manual. LADA, FAO, Rome.



### Appendix 1

Figure 1a: Initial screening of lands (Stage 1)





**Figure 1b. Stage 2a: Assessment of degradation by comparison to reference documented degraded areas**

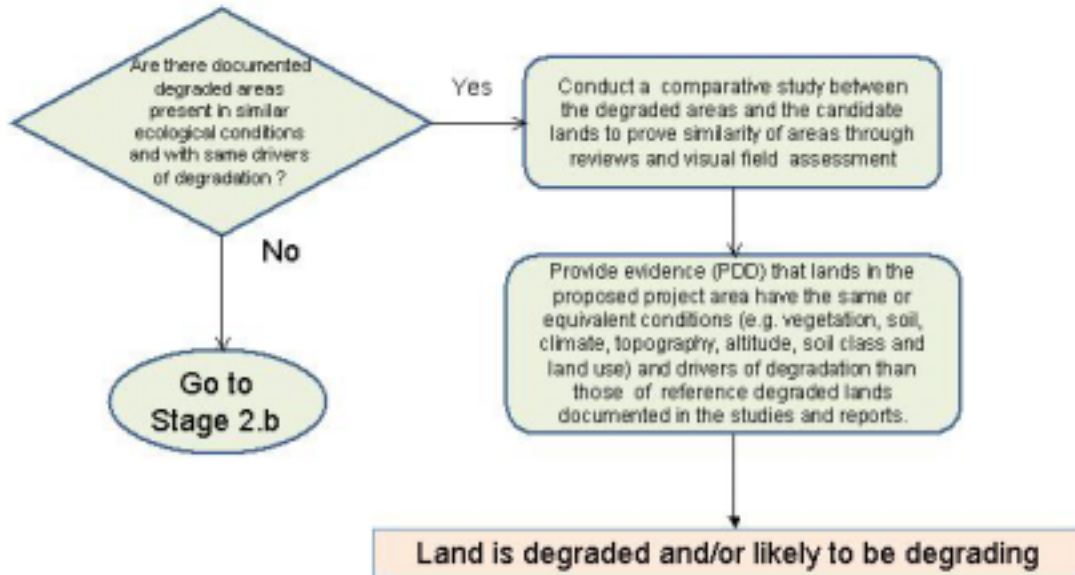
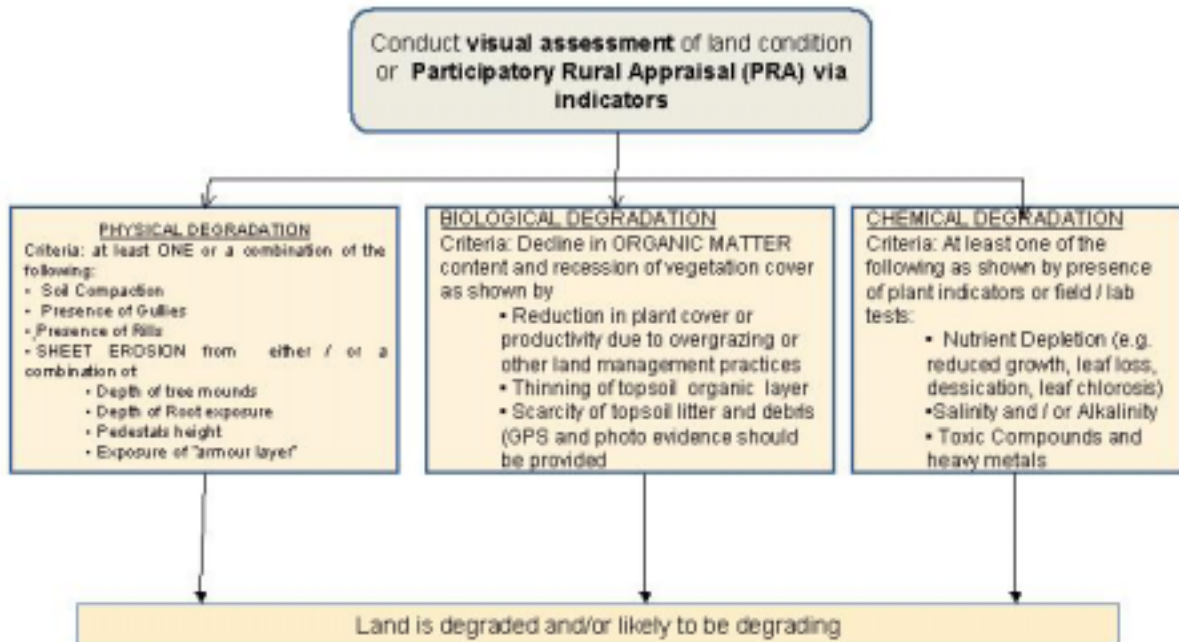


Figure 1c. **Stage 2b:** Assessment of degradation based on indicators, visual assessment or Participatory Rural Appraisal (PRA)



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History of the document

Version	Date	Nature of revision
01	EB 41, Annex 15 02 August 2008	Initial adoption.