

# CDM sinks: Do not change 1990 reference year for CDM reforestation definition.

The proposal to change the reforestation definition by moving the base year from 1990 (31 December 1989) to 2000 (31 December 1999) should be rejected. Canada first tabled this idea as a proposal to increase the eligible land area for reforestation activities under the CDM. The effects would be disastrous.

## Seeking even cheaper credits - at the expense of biodiversity and renewable energy projects.

If this proposal were adopted, the price of sink credits would be even lower, since only the cheapest projects will be implemented. These cheaper projects are likely to be those with detrimental side effects for biodiversity and local communities: fast-growing exotic tree plantations instead of agroforestry projects in the sinks sector, and even fewer renewable and energy efficiency projects in the CDM energy sector. These risks exist with the current agreed base year definition, but are substantially increased with an increase in land area, which would inevitably result from the Canadian proposal.

## Perverse Incentives for Deforestation.

Any shifts of the reference year create precedents for future commitment periods and could easily result in perverse incentives for deforestation. The Colombian proposal to have a definition with a "rolling" reference year should thus be rejected as well. A short buffer period between the time when an area is deforested and the time that it becomes eligible for reforestation credits will send a signal to landowners that deforestation will be rewarded by the CDM. Maintaining the 1990 base year under the agreed reforestation definition avoids that risk.

## Land cover data for 1990 is sufficient. There is no need to shift the base year.

One reason brought forward for the proposal to shift the reforestation baseyear is the claim that there is insufficient data in 1990. This claim is unfounded. The following points highlight why "data availability" is not a reason for shifting the reforestation baseyear:

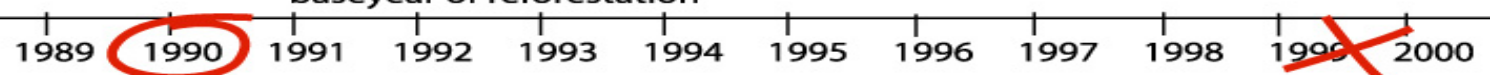
- Firstly, satellite images on land-cover have been collected since the 1980's from all areas of the world<sup>1</sup>.
- There are already extensive meta-databases available that catalogue numerous and varied historical landcover data products (satellite images, aerial photographs, ready-to-use landcover classification grids)<sup>2</sup>.
- There are different ready-to-use global landcover classification grids with data around 1990, including lesser and least developed countries. Among those are:
  - a) The University of Maryland's Global Landcover Facility (Defries et al, 2000)<sup>3</sup> (1km x

<sup>1</sup> The Multispectral scanning system (Landsat Ch 1-5) has been generating data since 1982 as has the Thematic Mapper Landsat 4,5) on a 30x30 meter grid. Furthermore, the SPOT satellite (High Resolution Visible And Infrared) has been in operation since 1986.

<sup>2</sup> See e.g. the Canadian 'Geoconnections' database at <http://ceonet.ccrs.nrcan.gc.ca/cs/en/index.html>.

<sup>3</sup> See e.g., the University of Maryland's Global Landcover Facility at <http://glcf.umiacs.umd.edu> and a) Defries, R.S., A.S. Belward (2000) "Global and regional land cover characterization from satellite data: an introduction to the Special Issue", Int. J. Remote Sensing, Vol 21, No. 6&7, 1083-1092. b) Hansen, M.C., R.S Defries, J.R.G. Townshend and R. Sohlberg (2000) "Global land cover classification at 1km spatial resolution using a classification tree approach" Int. J. Remote Sensing, Vol. 21, No. 6&7, pp. 1131-1364 c) Defries, R. S., M. C. Hansen, et al. (2000). "A new global 1-km dataset of percentage tree cover derived from remote sensing." Global Change Biology 6(2): 247-254

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1km), b) the “Land Processes Distributed Active Archive Center” established as part of the NASA's Earth Observing System Data and Information System initiative<sup>4</sup> (1km x 1km grid); and c) Earthstat fine-grid 30x 30m landcover classification set, known as “GeoCover”<sup>5</sup>. Further historic fine grid data (30m) is possible to analyze “on demand” for specific areas from LANDSAT and SPOT data.

- Determining whether a specific area was forested around 1990 or not, as is necessary for CDM project development, is even easier than establishing global land-cover datasets. A “one-shot” satellite image or aerial photograph combined with ground data is sufficient in many cases<sup>6</sup>.

By verifying the project developer’s collection of data for 1990 landcover (fine-grid satellite, aerial and/or ground-based data for the project site) with the global standardized 1km or 30m grid landcover classification datasets, it is possible to determine and verify an area’s eligibility without any discrimination against lesser of least developed countries.

A number of lesser developed country delegates have pointed out that the biggest obstacle to their having good land use base year information for 1990 is not sparse data *per se* but rather sparse institutional capacity and resources to access, compile and analyze existing land use data, regardless of the year in which it was collected. Strengthened capacity building and technology transfer are what is truly required.

## Conclusion

- Changing the base year only introduces new risks that could easily increase deforestation rates.
- Parties should reject initiatives to re-open the agreed reforestation definition base year.
- Sufficient data exists for establishing 1990 base year land use conditions.
- Parties should focus their efforts on addressing the important modality issues in the limited time remaining before COP-9.

## Contact

Malte Meinshausen  
Greenpeace International  
Mobile in Bonn: +41-79 54 22 841

Steven Guilbeault  
Greenpeace International  
Mobile in Bonn: +44-7801-857526

<http://www.greenpeace.org/SB18>

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<sup>4</sup> the “Land Processes Distributed Active Archive Center” established as part of the NASA's Earth Observing System Data and Information System initiative, see <http://edcdaac.usgs.gov/glcc/glcc.html> and Loveland, T.R., B.C. Reed, J.F. Brown, D.O. Ohlen, Z. Zhu, L.Yang, J.W. Merchant (2000) “Development of a global land cover characteristics database and IGBP DISCover from 1km AVHRR data” Int. J. Remote Sensing, 2000, Vol. 21., No 6&7, 1303-1330.

<sup>5</sup> see [www.earthstat.com](http://www.earthstat.com), direct link [http://www.earthstat.com/resources/feature\\_project.html](http://www.earthstat.com/resources/feature_project.html), accessed 10 October 2002.

<sup>6</sup> In order to establish a continuous global data set without the resources to visit all areas on-ground, you are likely to need an annual temporal series of satellite pictures to distinguish grass from woods etc. However with ground data combined from today’s project site, a “one-shot” satellite image satisfies the needs to distinguish forest from non-forest areas.

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