

BI(12)1576:1

Ms Catherine Day  
Secretary General  
Secretariat-General  
European Commission  
200 rue de la Loi  
B-1040 Brussels

Brussels, 1<sup>st</sup> March 2012

**Re: Biofuels - iLUC factors based on the IFPRI report**

Dear Madam,

According to our information, the European Commission are currently discussing, amongst other matters, the inclusion of iLUC values in the greenhouse gas balance of biofuels. The report "**Assessing the Land Use Change Consequences of European Biofuel Policies**" published by the International Food Policy Research Institute (IFPRI) in October 2011 is apparently being used as a basis for this discussion. An overview of the uncertainties and errors in the MIRAGE-BioF model, some of which were identified by the author himself, is provided in attachment.

**1. LUC values**

According to the author, Mr Laborde, the model is not suitable for precisely estimating the extent of land use change and the resulting greenhouse gas emissions, due to data uncertainties.

Providing precise LUC values in the report (table 14, p. 59) directly contradicts the author's proviso.

**2. Prohibited land use change**

The fundamental basis of the model ignores measures taken by governments to prevent land use change. Protection measures stipulated in Directive 2009/28 such as bans on direct land use change are not taken into account. The result is that the model erroneously assumes that biofuels prohibited by Article 17 paras. 3 and 4 Directive 2009/28 that were produced from raw materials stemming from land such as primary forest, peatland, etc. are in fact accepted within the EU framework. The reason for this is that the model is unable to distinguish between direct and indirect land use change. As a result, the model estimates, for example, that approx. 70% of greenhouse gas emissions caused by land use change will come from the production of raw materials originating from peatland, forests and rainforests. Government measures that work to counteract direct and indirect land use change are also disregarded with no distinction. These are, however, extremely important. In Brazil, for example, the "Amazon Region Protected Areas (ARPA)" programme<sup>1</sup> brought about a decline in rainforest clearance by 75% from 28,000 km<sup>2</sup> in 2004 to 7,000 km<sup>2</sup> in 2010. The effect for the model is particularly critical because by far the greatest case of land use change is projected for Brazil (0.49 million ha), despite it being largely prohibited there. Future government protection measures are also ignored. Even if these measures cannot be projected with certainty, completely ruling them out is problematic. It must be assumed that measures undertaken by governments to protect land will give priority to land with particularly high carbon stocks, thus preventing high greenhouse gas emissions. Overall, it must be assumed that up to approx. 70% of the projected greenhouse gas

<sup>1</sup> [www.wwf.de](http://www.wwf.de)

emissions would be eliminated if government protection measures were taken into account. The model is therefore so flawed that not only is it not possible to predict quantities, a qualitative forecast, i.e. whether land use change is anticipated and, if so, which land use change as well as the resulting greenhouse gas emissions, would also be meaningless.

### **3. Data errors**

A particularly notable example of the use of inaccurate data in the model is the global cropland basis. For the 2008 baseline scenario, apparently modified results from a simulation by the MIRAGE-BioF model were used instead of the FAO's data for that year (1.53 billion ha). The supposed value of 1.12 billion ha is not the result of the studies cited in this respect by the author and others. This would suggest that approx. 410 million ha of cropland has not been taken into account. This represents a data error of 27%.

### **4. Review**

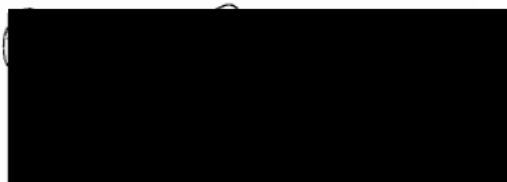
The author of the IFPRI report rejected validation of the model by independent experts at a hearing organised on this issue by the Commission on 18<sup>th</sup> November 2011. In our opinion, this violates the basic rules of good scientific practice. Performing an external review of the model for its suitability to forecast land use change by applying it to a historic time period (for example, 2000 to 2010) where actual land use change is known is absolutely essential. These types of evaluations are, for example, a scientific standard of the IPCC.

To sum up, the number and significance of the uncertainties are so critical that the model is not suitable for assessing the impact of indirect land use change in accordance with Article 19 para. 6 of Directive 2009/28.

Copa-Cogeca rejects this report being used as the basis for a proposal, in view of Article 19 para. 6 of Directive 2009/28. The assumptions and data that the MIRAGE-BioF model is based on are so flawed that the model is unsuitable for forecasting greenhouse gas emissions brought about by land use change. If the IFPRI report is used as a basis, the iLUC values introduced into law on the greenhouse gas balance of biofuels would be arbitrary, given that the MIRAGE-BioF is not in a position to forecast land use change and the associated greenhouse gas emissions.

We hope these comments will be granted your full consideration.

Yours faithfully,



  
Secretary General

Copies:



Annex : BI(12)1585