

FEDIOL Position on Indirect Land Use Change (iLUC)

FEDIOL members are oilseed crushers and vegetable oil refiners who produce vegetable oils and proteinmeals for food, feed, energy and non-energy technical uses. As an integral part of food, feed and biofuel chains, FEDIOL is a key stakeholder in the policy debate on iLUC.

FEDIOL has a long standing commitment to sustainability and promotes the production of biofuels from sustainably produced raw materials responding to the stringent sustainability and land-use criteria set out by the Renewable Energy Directive (RED).

FEDIOL strongly believes that indirect land-use change (iLUC) is a phenomenon which cannot be quantified with the available scientific knowledge. In the decision-making process, we urge the European Institutions to carefully examine the entirety of the food and energy supply chains, and take a holistic approach which would not jeopardise food and energy security, which would not limit access to sustainable raw materials and which would not endanger competitiveness of EU industries.

Basic assumptions in iLUC modelling show that current science is unreliable and biased

Studies trying to measure iLUC so far have given misleading account of vegetable oils' and proteinmeals' role in food, feed and technical uses.

In the case of IFPRI Report, false basic assumptions on oilseeds oil and meal content lead to an overestimation of iLUC as much as 78% (Table I & II). This study goes as far as considering proteinmeals as waste residues from biofuel production, and urges policy makers to discourage protein intake in the face of increasing European protein deficiency¹. IFPRI's observations and assumptions are based on the US food, feed and biofuels practices and their application to the European conjuncture does not reflect the reality. Therefore EU policy decisions shall not be based on studies following the IFPRI methodology.

The side-benefits of oilseed cultivation for the environment are also overlooked. For example, rapeseed as a break-crop reduces the need for agricultural inputs for the following crop rotation, such as fertilizer and pesticides, therefore lowering the GHG emissions that iLUC is trying to curb.

The attribution of peatland GHG emissions due to the substitution of vegetable oils is unjustifiable

First, palm oil use for biofuel production in the EU is minimal and palm oil is primarily used for food purposes around the globe (Table III). Moreover, there are technical (e.g. poor cold weather properties), and economic constraints (e.g. additional processing and investment requirements) to having more palm oil in the biofuel mix. Therefore, studies suggesting increased palm oil demand for biofuels are clearly overestimating demand growth potential.

Secondly, it is argued that global palm oil production would increase to make up for the future demand of other vegetable oils, by means of substitution. Palm oil is a solid fat at ambient temperatures and cannot be used in either technical or food applications requiring liquid oils. Despite the use of saturated fatty acids (SAFA) has increased in Europe over the years, currently food industries are trying to reduce the SAFA content in food applications². Therefore, increased substitution of palm oil would prove contrary to the reformulation efforts undertaken since 2008 (Table IV).

Studies show that there is enough uncultivated land

In its report³ on sustainability and agriculture, World Bank finds that there are 446 million hectares of uncultivated land which is non-forested, non-protected and populated with less than 25 persons/km², of which 262 million hectares are found to have high agro-ecological potential with less than 6 hours travel time to markets. This fact is often overlooked and not taken into account in several studies trying to identify iLUC.

¹ [European Parliament resolution on the EU protein deficit: what solution for a long-standing problem?](#), (2010/2111(INI)), 8 March 2011

² For more information, please see: [FEDIOL Nutritional Factsheet on 'Innovation in Processing and Reformulation of Vegetable Oils and Fats'](#), December 2011

³ [The World Bank, "Rising global Interest in Farmland: Can it yield sustainable and equitable benefits?"](#), Agriculture and Rural Development Section, Klaus Deininger et al., 2011

Multi-feedstock is crucial for ensuring food security as well as reaching 10% target in transport

Multi-feedstock sourcing is absolutely critical for food, feed and biofuel markets. If the Commission would introduce any quantifying provisions for addressing iLUC, major oilseed pathways would be penalised and more pressure would be put on a reduced number of crops to meet the demand. This would come at a cost of higher price volatility and put the 10% target in jeopardy.

If biodiesel pathways in Europe are to be disqualified with a precautionary decision on iLUC, this could make 70% (15.8 million tonnes) of rapeseed and 25% (3.2 million tonnes) of soybean crushing redundant, depriving the livestock sector from up to 12 million tonnes of protein rich meals made available through the often integrated oilseeds crushing, refining and biodiesel production processes. Moreover, oilseeds would disappear from crop rotations in many EU regions and the structural protein deficit in Europe would worsen, contrary to the positive progress over the recent years where a certain degree of independence has been gained from 3rd countries, thanks to biodiesel production (Table V).

According to the National Renewable Energy action Plans (NREAPs), biodiesel is key in reaching the 10% renewable energy target in transport by 2020 and beyond. If an oilseed feedstock would be excluded from the scope of RED, no other crop will be able to replace the shortfall in supply and the EU renewable energy objectives would become unachievable.

Feedstock and technology neutral approach is necessary in reaching a holistic approach

In the absence of robust and reliable science, we urge the European Commission to follow a feedstock and technology neutral approach. In FEDIOL's view, attribution of "labels" to biofuels runs counter the objective of reaching a competitive economy.

Technology/feedstock neutrality ensures even-handedness of the EU decision making for relatively homogenous products provided in a single market using different technologies for delivery.

Addressing iLUC is possible while safeguarding the European competitiveness and economy

Based on the currently available studies, including the IFPRI Report, there is no converging evidence to draw undisputable conclusions to the extent of iLUC. In this view, the European Commission should abstain from addressing iLUC by taking any quantifying measures, including iLUC factors.

If the EU would introduce quantified measures (thresholds, iLUC factors, etc.) to address iLUC, this would represent a turnover loss between 11.2 billion and 13.4 billion Euros annually for the FEDIOL members. The crushing industry would have to fundamentally restructure to go back to pre-biofuels levels with considerable negative effects on jobs and on rural development.

In this view, FEDIOL urges the European Commission to consider that:

- Taking a precautionary measure at the EU-level, based on inconclusive and disputable evidence, would only hamper the EU economy and competitiveness while increasing price volatility;
- To address iLUC with a comprehensive understanding and in a holistic way, biofuels chains and agricultural markets around the globe shall be carefully examined and identification shall be made as to where the problem lies;
- iLUC is global in scale and dialogue with 3rd countries are central to effectively tackle this phenomenon;
- Enhancing understanding and the better uptake of good agricultural practices, through encouraging effective environmental legislation and land management practices in third countries could prevent peatland and forests' conversion into farmland;
- A constructive ex-post regulation is the viable solution in effectively addressing iLUC and, at the same time, safeguarding the competitiveness of European industry and the EU economy.

FEDIOL represents the interests of the European vegetable oils and proteinmeal industry. With about 150 facilities in Europe, the sector provides over 20.000 direct employments. Its members process 30 million tonnes of basic products a year and the EU industry serves the second largest world market of vegetable oils after China.

Oilseed crushing yields vegetable oils and proteinmeals as co-products. While vegetable oils are used for food and technical uses (pharmaceuticals, paints, detergents, biodiesel, etc.), proteinmeals are used to meet the increasing global demand for meat and protein.

Annex

Table I – Oilseeds Oil Content and Overestimation of iLUC by IFPRI Study

	IFPRI Modelling	Actual Oil Content	Δ%	Underestimation per year (2010)	Yield (t) per ha	Corresponding Land Area (ha)
Rapeseed	35%	42.33%	7.33%	3.43 million tonnes	3	1,143,000
Soybeans	18%	18.78%	0.78%	0.24 million tonnes	2.5	96,000
Sunflower	39%	44%	5%	0.03 million tonnes	1.8	16,660
Palm fruit	23%	28%	5%	0.16 million tonnes	20.5	7,890
TOTAL	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>4.25 million tonnes</i>	<i>n/a</i>	1,263,550 ha*

***This figure corresponds to 71% of total iLUC estimation by IFPRI**

Source: IFPRI & FEDIOL Statistics

Table II – Oilseeds Proteinmeal Content and Overestimation of iLUC by IFPRI Study

	IFPRI Modelling	Actual Meal Content	Δ%	Underestimation per year (2010)	Corresponding Land Area (ha)
Rapeseed Meal	51.45%	55.32%	3.87%	640,000 t	106,660
Soybean Meal	77.7%	80.09%	2.39%	130,000 t	21,660
Sunflower Meal	23.4%	55.20%	31.8%	80,000 t	13,330
TOTAL	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>850,000 t</i>	141,650 ha*

Note: Average feed wheat yield of 6t/ha is used in conversion

***7% of total iLUC estimation by IFPRI**

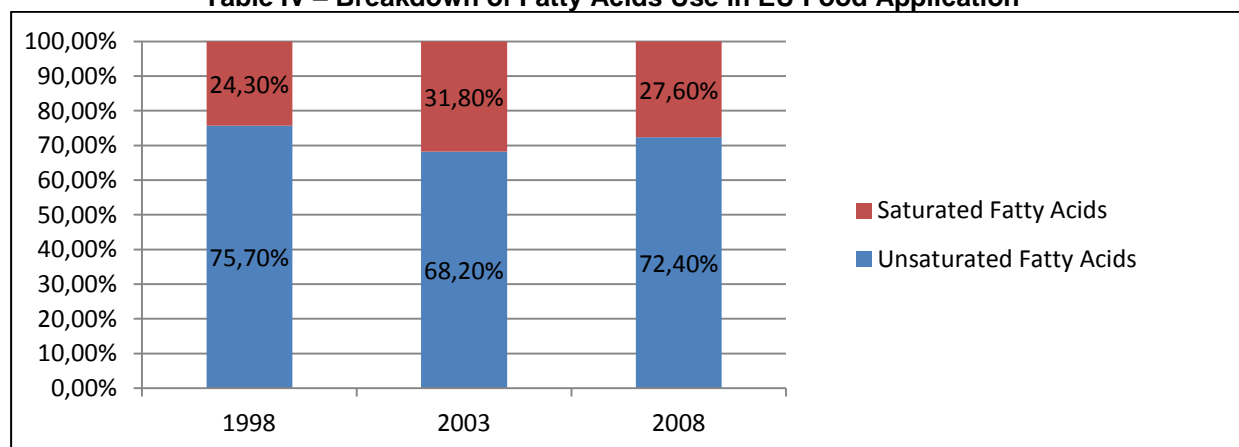
Source: IFPRI & FEDIOL Statistics

Table III – Breakdown of EU Biodiesel Production in 2010

Biodiesel by feedstock	Vegetable Oil Demand	%
Rapeseed Oil Biodiesel	6.93 million tonnes	74.81%
Soybean Oil Biodiesel	1 million tonnes	10.76%
Animal Fat and Used-Cooking Oil	0.95 million tonnes	10.23%
Palm Oil Biodiesel	0.3 million tonnes	3.23%
Sunflower Oil Biodiesel	0.09 million tonnes	1%
TOTAL	<i>9.29 million tonnes</i>	100%

Source: FEDIOL Statistics

Table IV – Breakdown of Fatty Acids Use in EU Food Application



Source: FEDIOL Statistics

Table V – EU27 Proteinmeal Imports from 3rd Countries

(1000t)	Degree of Independence	2010	2008	2006	2004
Proteinmeal Imports	10.3%	28420	29537	31430	31674

Source: OilWorld Data