FEDIOL position paper on a Protein Plan for Europe

FEDIOL – representing the European vegetable oil and protein meal industry – welcomes the initiative by the European Commission to come up with a report on a Protein Plan for Europe and would like to share some views on its potential development.

The Protein Balance Sheet¹ developed by the European Commission in collaboration with FEDIOL and other stakeholders clearly shows that Europe is producing already important amounts of protein. FEDIOL considers that there is potential to increase the production of domestically produced protein for both human and animal consumption.

However, it would be misleading to consider that all proteins have the same value and that locally produced protein has the potential in any circumstances to replace all imported protein crops. As demonstrated by the Protein Balance Sheet, Europe has a strong deficit of protein-rich crops and feed material. Replacement of these proteins would require further growth of protein-rich varieties.

Among these crops, rapeseed, soybean, sunflower and linseed certainly play an important role and should continue playing this role in the years to come. For this reason, our vision of a Protein Plan for Europe would encompass the inclusion of oilseeds as an integral part of the group of protein crops to be promoted via a dedicated plan.

The importance to preserve existing protein sources

Thanks to local rapeseed production, the EU has substantially enhanced its protein self-sufficiency rate. More specifically, the 60% meal which rapeseed delivers is high in protein content (33%) and has helped reduce by 13% the EU’s dependency on imported proteins - notably from soybean meal - since the introduction of the biodiesel outlet.

Indeed, over 11 million tons of protein-rich meals, mainly from rapeseed, are directly related to the production of biodiesel. However, all these benefits risk disappearing if the phasing out of crop-based biofuels proposed in the post-2020 revision of the Renewable Energy Directive were to be implemented. The Commission proposal is in clear contradiction with the EU protein plan that DG Agri is trying to promote and would trigger the loss by EU farmers of a highly valuable source of high protein-containing feed and an essential source of revenue.

Challenges and opportunities of soybean production

According to the Protein Balance Sheet, out of the 29.4 million tons of protein-rich soybean meal used for feed in Europe in 2016/2017, 1.5 million tons were produced from EU-grown soybeans. This share already represents a doubling of domestic production compared to previous years and we welcome measures aimed at stimulating further EU soybean production. European crushers are supporting an expansion of soybean cultivation in the areas that are favourable from agronomic perspective for the further development of this variety which has considerable assets for animal nutrition.

There are estimates according to which, even in the best scenario, soya production in wider Europe – which also includes neighbouring regions outside the EU – could increase by more than 50% in 2025 up from the current 9.3 million tons.² Out of this volume, though, only 2.5 million tons currently come from EU-28 production. Even if increased production from

those regions had the agronomical potential to replace a sizable share of existing EU imports, it would equally be classified as imports and, as such, not necessarily provide higher legal certainty to EU operators than is currently the case.

Moreover, it must be recognised that the additional growth will not be able to replace entirely the imported volumes of soybean meal and that full soybean imports replacement by increased rapeseed or sunflower production will not be achievable either. Indeed, soybean meal is a fundamental protein ingredient for animal feed due to a high protein content but also to the protein quality, in light of the high concentration of essential amino acids.

In this sense, its potential substitution with rapeseed or sunflower would demand larger quantities, due to their lower content in protein and essential amino acids (Table 1). Based on protein content, 1.3-1.4 kg of rapeseed meal or sunflower meal is needed to substitute 1 kg of soybean meal. Based on ileum digestible lysine, the necessary substitution even increases to 1.9 kg for rapeseed meal and 2.7 kg for sunflower meal.

Table 1: Contents of Crude protein and some essential amino acids (g/kg)

<table>
<thead>
<tr>
<th>Product</th>
<th>Crude Protein</th>
<th>Lysine</th>
<th>Of which: Ileum digestible Lysine</th>
<th>Methionine + Cysteine</th>
<th>Of which: Ileum digestible methionine + cysteine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybean meal</td>
<td>464</td>
<td>28.8</td>
<td>25.5</td>
<td>13.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Rapeseed meal</td>
<td>335</td>
<td>18.4</td>
<td>13.3</td>
<td>15.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Sunflower meal</td>
<td>347</td>
<td>12.1</td>
<td>9.3</td>
<td>13.5</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Soybean meal: crude protein<480 g/kg, crude fibre<45 g/kg; Rapeseed meal: crude protein<380 g/kg; Sunflower meal: partly dehulled, crude fibre 160-200 g/kg.


Therefore, we believe that the promotion of additional EU cultivation should go hand in hand with initiatives that support sustainability and no-deforestation in the imported soy chain, and that the EU should recognise the considerable efforts that have been undertaken by European stakeholders and their overseas partners to supply from sustainable sources from extra-EU origins.

The particular case of linseed

Linseed crushing in the EU (655.000 tons) produces 400.000 tons of protein-rich linseed meal for feed. The domestic EU production of linseed is however only 117.000 tons and therefore over 80% of the linseed for crushing needs to be imported from third countries (such as Kazakhstan, which are not always reliable trade partners). As the EU markets already exist for both the linseed oil and the linseed meal, the entire supply chain would benefit from an increase in EU linseed production.

The role of protein crops other than oilseeds

FEDIOL acknowledges the importance of enhancing the production of pulses cultivated in European countries, namely grain legumes such as faba bean, field pea or lupins together with other minor crops. This sector has been boosted over the last years via support mechanisms, namely the coupled support option for Member States and the introduction of greening measures in the form of dedicated Ecological Focus Areas with the 2013 CAP reform.
However, by looking at present protein crops volumes - as shown in the Protein Balance Sheet - we believe their actual contribution will still be rather marginal in the near future, especially if we consider that the recent ban on the use of pesticides for nitrogen-fixing crops grown in the Ecological Focus Areas will likely slow or halt their further production.

**Increasing consumers’ choice**

Although the non-GM/GM status is not a criterion for sustainability and the choice for one or the other quality should be left to market decision, it is worth noting that, by increasing its domestic production of protein crops - mostly rapeseed and soybean - the European Union can contribute to providing consumers with a wider choice when it comes to non-GM products.

**Boosting further innovation**

Overall, innovation is key to improve business performance, efficiency and enhance sustainability of the processing activity.

Already, the development of different varieties of rapeseed and sunflower with low levels of glucosinolate has made it possible to replace some portions of high-value protein imports with local produce, by making the rapeseed and sunflower meal more digestible for animals. While this is valid for pork and cattle, additional efforts need to be done in order to make those varieties also fit for poultry consumption.

In this sense, further work and research is needed to improve not only digestibility but also taste and quality of the protein in existing varieties, notably those which are already at appropriate yield levels and also to continue increasing the protein content in protein-rich crops.

As concerns soybean, linseed and pulses production, vital yield improvements are required in order to enhance attractiveness for EU farmers in taking a revenue risk and avoid facing more limited earnings as compared to other more mainstream productions. This is the only lasting way to improve their contribution towards the reduction of the EU’s protein dependency.

On the whole, plant breeding innovation is a promising new tool offering opportunities to secure the long-term sustainability and profitability of the sector. In FEDIOL’s view, clarification of the regulatory status will certainly help but will not be sufficient to ensure a successful uptake of these techniques. Public acceptance will be a necessary condition of their development and diffusion, to be achieved through transparency and constructive communication.

**Ensuring an effective protein supply in the EU**

FEDIOL considers that an effective Protein Plan should act as a linking tool between the different EU policies which have a direct or indirect connection with protein supply, in order to ensure consistency and policy coherence.

In this sense, we call on the European Commission to avoid putting at risk an existing source of protein via the elimination of the conventional biofuel outlet in Europe, which would further worsen our dependency on imported meal.

Similarly, a consistent Plan should look at ways to ensure that additional growth is economically viable. Yet, increasingly the EU has shown a tendency to strengthen its environmental profile at the expense of ambitions in production growth. Namely, Europe is taking a step change as regards Plant Protection Products (PPPs) by delisting or reviewing...
a number of active substances. Some protein crop varieties are extremely sensitive to the lack of any type of support and this is an issue that needs to be tackled, as availability of PPPs is an essential pre-requisite for the success of any protein plan.

For this reason, the Protein Plan should ensure that ambition on enhanced domestic protein production, sustainable practices and new policies with regard to PPPs are aligned. These are complex factors that need to be assessed in conjunction, either by growing new varieties or by developing new products that are less impactful on the environment while still serving the purpose.

If the European Commission considers that a way forward is to provide support – whether at direct EU level or via national schemes – to further production of protein crops, FEDIOL believes that oilseed crops should also be integrated in that category.