International Platform of Insects for Food & Feed (IPIFF)

7 rue Joseph Stevens, 1000 Brussels



Public Consultation - CFP Regulation Evaluation IPIFF Position Paper

I. About us

IPIFF, is the International Platform of Insects for Food and Feed, which is the umbrella organisation of the European insect-producing sector towards the European institutions. Bringing together 75 members - most of which are European insect-producing companies - IPIFF promotes using insects and insect-derived products as a top-tier source of nutrients for human consumption, animal feed and plant nutrition.

II. About this Consultation

Considering the purpose of this evaluation is to take stock of the CFP Regulation's impact in <u>the conservation of marine biological resources</u> and the <u>management of fisheries and fleets exploiting such resources</u>, <u>the supply chain</u>, consumers and public authorities in all EU Member States over the past 10 years of implementation (2014-2024).

IPIFF presents this Position Paper alongside the Questionnaire to outline how the Regulation of the Common Fisheries Policy can be enhanced. Specifically, we address its effectiveness, efficiency, ability to tackle current and emerging risks, and its coherence with other internal policies and international agreements, with greater recognition, support, and promotion of sustainable aquafeed production and use, such as insects.

I. Effectiveness of the CFP Regulation

1. Its contribution to the environmental sustainability and conservation of marine resources

IPIFF considers that the effectiveness and efficiency of the CFP Regulation on promoting the environmental sustainability and conversation of marine resources could be much better achieved. Aquafeed accounts for up to 80% of a producer's environmental footprint and currently there is a large dependency on the use of non-sustainable aquafeed sources such from fishmeal and soybean meal. These negative impactful practices contradict the objectives of this Regulation on ensuring the sustainability of the fisheries and aquaculture sectors and conservation of marine resources.

CFP Regulation to improve the environmental sustainability of fisheries and aquaculture, protect marine resources and biodiversity could be best achieved by promoting the EU domestic production and use of sustainable alternative aquafeed such as insects.

Over the past 20 years, the European Parliament has recurrently highlighted the EU's strong dependency on imports of fisheries and aquaculture products and highlighted that possible future developments could include a change in production towards less cost-intensive and more sustainable methods.

In 2022 the European Parliament stresses 'the need to promote ecologically sustainable marine proteins and oils to be used as feed (...), such as insect meal (...) and the partial replacement of marine proteins and oils with non-marine alternatives that are sustainably produced'.

According to the European Commission's strategic guidelines for aquaculture, producing fish feeds that are sustainable is vital to the environmental performance of the EU aquaculture sector. Also, the European Commission states that feed producers should limit reliance on fish meal and fish oil. Instead, alternative protein ingredients such as insects or the waste from other industries should be used².

Insect proteins can be used alongside fishmeal and soybean meal but in relatively small inclusion rates, sufficient to achieve their functional properties. As such, their price will not be a reflection on what they replace but what they contribute to the overall value proposition of the feed. This should allow profitable scale-up of new sectors such as insects, while supporting the CFP Regulation to achieve its environmental, social and economic objectives.

By 2030, we estimate a global market potential of up to 200,000 metric tons, or 40% of the insect protein market and representing volumes, less than roughly 1% of the global aquafeed in today's market.³ The use of insect meal in aquafeed in this according to these estimates, could translate in great economic, social and environmental impact of the EU Common Fisheries and Aquaculture sectors.

Insect farming is a circular sector

Insects convert underused biomasses waste into high-quality protein, contributing to a circular economy and reducing the environmental impact of aquaculture feeds.

Protect the marine resources and biodiversity

Using insect meal as an alternative to fishmeal reduces the pressure on wild fish stocks, promoting more sustainable aquaculture practices. These advantages position insect-based feeds as a promising solution for enhancing the sustainability of aquaculture operations.

Improve environmental sustainability

Insect farming requires less land and water compared to traditional livestock production. Life Cycle Analyses have shown that insect-based proteins can significantly lower CO₂ emissions and free up land for nature conservation.

2. The contribution to the economic sustainability of people active in the fisheries and aquaculture sectors and coastal communities

The CFP Regulation could best achieve its objectives on promoting the economic and social sustainability of people active in the fisheries and aquaculture sectors and overall, in the coastal communities by promoting the production of sustainable aquafeed.

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¹ European Parliament resolution of 4 October 2022 'On striving for a sustainable and competitive EU aquaculture: the way forward.

² European Commission's strategic guidelines for aquaculture

³ Rabobank study 2021

Importantly, the cost of feed is a significant expense to aquaculture producers, so developing more cost-effective solutions is important. Alternatives to commercial feeds must be affordable and accessible to aquaculture producers, so they are encouraged and able to use them on their farms.

The need to develop sustainable feed products creates an economic opportunity by developing livelihoods in new industries such as insects, which can promote the environmental sustainability objectives of the fisheries and aquaculture sectors and thus, have high market and societal impact by creating new jobs. Therefore, the environment, social and economic impact of developing alternative fish and aquafeeds are very important.

Insect farming and producing activities generate new economic opportunities by connecting existing agri-food chains and creating new agri-food segments, besides providing an income complementation to fishermen.

With its different application purpose products (incl. human nutrition, animal feed, soil fertiliser and/or technical applications), the EU insect sector contributes to the creation of innovative and green jobs in coastal areas, encompassing a wide range of skills and diverse professional qualifications. With 3,500 jobs created until today (incl. above 1,000 direct jobs) and expected to create up to 30,000 jobs by 2030. The production of insects boosts job creation in the fisheries and aquaculture sectors while complementing income for fishermen and aquaculture producers.

3. The contribution of CFP Regulation has had on supporting modernisation and innovation

More resources and incentives should be allocated to promote the innovation in the fisheries and aquaculture sectors, namely in what concerns the use of nutritional added value and sustainable aquafeed, such as insects.

IPIFF also considers that in what concerns the impact of the CFP Regulation on supporting modernisation and innovation in the fisheries and aquaculture sectors could be much improved, namely by allocating thematic research and funding priorities towards the development of nutritionally high-valued and sustainable feed.

Insects have many benefits both in what considers its nutritional value and contribution to improve the environmental sustainability of the fisheries and aquaculture sectors.

<u>Nutritional Value and Growth Performance</u>: Insects such as the black soldier fly (*Hermetia illucens*) and yellow mealworm (*Tenebrio molitor*) are rich in proteins, essential amino acids, and lipids.

Studies have shown that partially/completely replacing traditional fish meal with insect meal can maintain or even enhance growth rates in species like Atlantic salmon and rainbow trout.

Insects as a natural food source, provides sustainability and marketing credentials to the final products (fish or shrimp).

- Functional Properties: One of these is palatability. Insects are part of the natural diet of fish and shrimp attractive to fish and shrimp and can increase appetite.
- **Gut Health**: The gut health for certain species can be improved by including insects in the diet (eels and sturgeon, catfish, trout, and smolt the juvenile, freshwater stage of salmon).

- **Antioxidant Function:** Research also increasingly puts evidence in the antioxidant function of insect meal.
- **High-Quality Protein:** Produced continually in highly controlled environments, with a short value chain. The larvae are converted into protein meal and oil immediately after harvesting. This means that these are high-quality products with no degradation of the proteins.
- **Health Aspect:** Research indicates that diets incorporating insect meal can enhance the gut microbiota of fish, enhancing immune responses and potentially increasing resistance to diseases. For instance, feeding rainbow trout with black soldier fly larvae meal has been associated with a higher presence of beneficial gut bacteria.

4. Ensuring availability of food supplies at reasonable prices for consumers

While fish farming is one of the fastest-growing food production sectors in the world, the EU accounts for less than 1% of global production. The EU's self-sufficiency rate for fishery and aquaculture products is rather low, making the EU dependent on imports of these products. Despite the European Commission's efforts to promote the development of aquaculture within the EU, the production rate is stagnating⁴.

The high fishmeal and fish oil volatilities are impacting the aquafeed industry and the potential effects on aquafeed producers and farmers in the medium term. Aquafeed accounts for up to 70% of production costs and up to 80% of a producer's environmental footprint. Aquafeed prices have increased up to at least 30%, which is partly a result of geopolitical issues, energy prices increase, and further susceptibility due to the limited raw materials availability⁵.

As there is a need to reduce both fishmeal and soybean meal for competitive, economic and environmental sustainability reasons, this is a valid role for insect proteins. Making more available other aquafeed options not only would increase the competitiveness of the EU Aquaculture sector by reducing the production costs of fisheries and aquaculture and thus, ensure reasonable prices to the end consumer.

Furthermore, the need of providing alternative aquafeed options is highlighted by the recent geopolitical instability and constant threat of climate change related events, which creates higher volatility of EU fisheries and aquaculture products to the end consumer, endangering food security.

Making wider available EU produced insects as aquafeed, reduce the dependency of fish and aquaculture producers to a limited range of protein sources, making them less reliant on imports for aquafeed. Additionally, as insects are produced in controlled environments also make these sectors are less exposed to the risks associated with geopolitical instability and climate change related events. Consequently, the EU fisheries and aquaculture sectors can best resist to market price volatility.

In addition, the EU Aquaculture sector lacks competitiveness with other regions of the world in segments of the market such as organic aquaculture and thus making less available and affordable EU made organic aquaculture products to the EU consumer.

⁴ Briefing European Parliament: EU aquaculture: State of play

⁵ Source: Fishmeal and fish oil shortage IV: The impact and an outlook in Aquafeed Magazine, Nov. 2023

⁶ Rabobank, 2021.

Insect farming provides a valuable solution to support the growth of aquaculture and reduces reliance on non-organic marine ingredients that might be associated with a negative impact on marine biodiversity. Nevertheless, organic regulations on organic insects should consider the needs of aquaculture producers and similarly, organic aquaculture regulations should accommodate this new source of protein.

For instance, in Canada, whole insects, insect meal and insect oil can be included in the diet of organic aquaculture species. The insect sector is developing rapidly, and organic production should play a key part in these early stages. Therefore, the authorised use of conventional insects in aquafeed in organic aquaculture, similarly to other parts of the world, can improve the availability and affordability of organic EU made aquaculture products to the EU consumer.

II. Efficiency of the CFP Regulation

Considering the reasons presented above in what concerns the effectiveness of the CFP Regulation, we believe that its efficiency could be best achieved with a set of measures to boost the production and use of sustainable and nutritional high value aquafeed products, domestically produced in the EU. Thus, improving the efficiency of this regulation in achieving its environmental, economic and social objectives.

In line with was presented above, IPIFF proposes that the CFP Regulation in its reviewed version for the period post-2027 to envisage incentives towards the use of insects in aquafeed.

Proposals to improve the efficiency of the CFP Regulation in its contribution to the environmental sustainability and conservation of marine resources and to ensure availability of food supplies at reasonable prices for consumers

IPIFF believes that the best way forward to promote the use and production of sustainable aquafeed is by setting sustainable standards with binding targets for its use at the EU level. These, to be achieved gradually, with the establishment of progressive mandatory percentages for the inclusion rate of sustainable aquafeed, such as insects, in aquafeed.

Using the example of EU ReFuel Aviation Initiative, which sets targets for Sustainable Aviation Fuel usage at EU airports with the established targets for its use of:

- 2% by 2025
- 5% by 2030
- 63% by 2050

Similarly, the EU fisheries and aquaculture sectors, through the CFP Regulation should set progressive targets for the use of sustainable aquafeed in the EU, namely:

- 2% by 2027
- 5% by 2030
- 50% by 2050

Proposals to improve the efficiency of the CFP Regulation in its contribution to <u>ensure</u> availability of food supplies at reasonable prices for consumers, namely in segments of the <u>market where the EU Aquaculture sector is not competitive at a global stage such as organic Aquaculture.</u>

The EU Aquaculture sector lacks competitiveness with other regions of the world in segments of the market such as organic aquaculture and thus making less available and affordable EU made organic aquaculture products to the EU consumer. Following the example of Canada, where organic aquaculture legislation authorises the use of whole insects, insect meal and insect oil to be included in the diet of organic aquaculture species. The EU should accommodate such possibility in its organic aquaculture legislation. The insect sector is developing rapidly, and organic production should play a key part in these early stages.

Therefore, the authorised use of conventional insects in aquafeed in organic aquaculture, similarly to other parts of the world, can improve the availability and affordability of organic EU made aquaculture products to the EU consumer.

Proposals to improve the efficiency of the CFP Regulation in its contribution to economic sustainability of people active in the fisheries and aquaculture sectors and coastal communities

The CFP Regulation has clear objectives towards the promotion and development of sustainable fisheries and aquaculture sectors. Despite the potential positive environmental, social and economic impact associated with the development of producing sectors of sustainable aquafeed to people active in fisheries and aquaculture sectors and to the overall EU coastal regions, there is a lack of investment to support their development. Sustainable aquafeed productions such as insects, creates new income revenues for fishermen and aquaculture producers and fosters job creation and the overall socio-economic development of EU coastal regions.

Considering that the European Maritime Fisheries and Aquaculture Fund (EMFAF) encompasses financial incentives to achieve its Objective 2.1 "Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production while ensuring that the activities are environmentally sustainable in the long term", we believe that the €1.0 billion Euros available towards this end should include specific and targeted financial incentives towards EU sustainable aquafeed production, such as insect production. These financial incentives should promote the creation of new production facilities and to support the upscale existing production facilities of sustainable aquafeed such as insects, to better face the current EU fisheries and aquaculture sector needs for sustainable aquafeed.

Proposals to improve the efficiency of the CFP Regulation in its <u>contribution to modernisation</u> <u>and innovation</u>- Promoting the circularity in fish and aquafeed, improving the alignment with other EU policies such as the EU Bioeconomy Strategy and Circular Economy Act & development of a single market for food waste.

Public authorities should identify bottlenecks, including legal standards, that restrict circularity (e.g., prohibitions on the use of certain products as feed) to establish conditions for possible use in feed of nutrients recovered from waste streams (currently prohibited).

Public authorities must then ensure that the relevant business establish a solution. They should pay particular attention to the use of former foodstuffs or catering waste containing fish and meat for insect or polychaetes farming, which would allow about a third of the food waste generated in the EU to be transformed into highly nutritious protein animal feed, including fish and aquaculture feed.

Diversifying the spectrum of authorised substrates used in insect farming is considered as key to reducing the footprint of insect farming activities while representing a promising opportunity for tackling the problem of food waste:

About 30% of the food waste (e.g. former foodstuffs, catering waste) generated in the EU could be suitable for insect farming activities.

• Use of meat and fish containing former foodstuffs as substrates for farmed insects. There is a growing documentation supporting the filling of current knowledge gaps (e.g. potential of insects to transfer 'infectious diseases)

III. Governance of the CFP Regulation

The large increase in EU funding available for aquaculture over the 2014-2020 period was followed by relatively low absorption and undemanding project selection criteria. EU aquaculture has seen little growth over the period, and there are no reliable indicators to track the sector's sustainability or the contribution of the increased EU funding.

The ECA states that some of the current challenges, though not specifically mentioned in the EMFAF Regulation, are recognised by the Commission's strategic guidelines in setting objectives to make EU aquaculture more sustainable and competitive between 2021 and 2030.

The European Court of Auditors (ECA) Recommends that the Commission⁷:

- 1. support member states in addressing the obstacles to a sustainable development of EU aquaculture.
- 2. improve targeting of EU funds and sustainability.
- 3. enhance the monitoring of EU funding's performance and of environmental

In view of the ECA Report on the European Commission Strategic Guidelines on Aquaculture, IPIFF reiterates that means to improve the governance and efficiency of the intended results by the CFP Regulation, includes the following proposals:

Proposals to improve the governance of the CFP Regulation

- 1. Allocation of funding to support the development of sustainable aquafeed production such as insects, under the EMFAF.
- 2. Also considering the same ECA Recommendations, where the European Commission lacks achievement in its objectives through the open method of coordination, IPIFF reiterates the need to set sustainable standards, with binding targets for its use at the EU level and implemented at by the MS at National level. These, to be achieved gradually, with the establishment of progressive mandatory percentages for the inclusion rate of sustainable aquafeed, such as insects, in aquafeed such as:
- 2% by 2027
- 5% by 2030
- 50% by 2050.
- 3. Better alignment of the CFP Regulation with other relevant EU policy initiatives such as the Bioeconomy Strategy, the EU Circular Act or the creation of a single market for waste, namely for food waste. This can be achieved through more coordination between DG MARE, DG SANTE and EFSA towards the authorisation for the use of meat and fish containing former foodstuffs as substrates for farmed insects. There is growing documentation supporting the filling of current knowledge gaps (e.g. potential of insects to transfer 'infectious diseases).

IPIFF, Brussels the 21st of April

⁷ Source: European Court of Auditors-Report- special report 25/2023: EU aquaculture policy – stagnating production and unclear results despite increased EU funding