

## CJ Selecta: a dedicated SPC supplier for the aquafeed industry with responsible, sustainable, and transparent supply chain

### Abstract

Today more than ever, the sustainable development of aquaculture industry is getting much attention due to its great potential and the crucial role that is called to play in meeting the future tremendous demand in the food supply. It is obvious that aquaculture in order to achieve its future target needs to intensify and expand further its production in a sustainable way minimizing the environmental impact.

Among aquaculture activities, aquafeed production is often to causing the more serious environmental repercussions. Consequently, aquaculture sustainability is profoundly linked to the manufacture of sustainable aquafeeds and the sourcing of sustainable aquafeed ingredients.

Among the feed ingredients of plant origin used today, soy products and especially soy protein concentrate are the ingredients of choice and by far the most used in salmon diets. CJ Selecta is a true pioneer in the production of soy protein concentrate and is currently the leading global supplier to the aquafeed industry. CJ Selecta is committed through various sustainability activities and continuous innovation to serve the industry to achieve its ambitious goals of reducing its environmental impact.

Today, CJ Selecta is proud to be recognized as a frontrunner by the industry for different sustainability indicators such as carbon footprint. One of the latest innovations of CJ Selecta is the newly launched application/tool called “SoyTrace” dedicated to increasing transparency through advanced traceability of soy products for customers and the consumer market.



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### Background

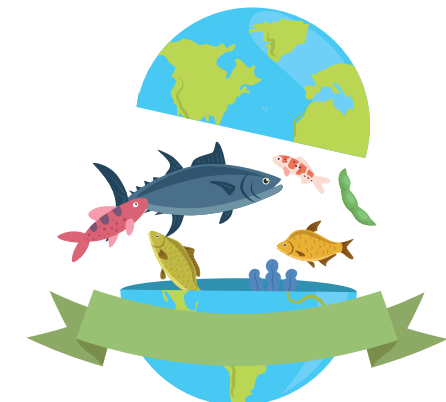
In the coming years, the agri-food sector is expected to face enormous challenges as the world population is projected to reach 9.7 billion by 2050 from 8 billion currently (UN, 2022).

Undoubtedly, we are in a transitional phase characterized by uncertainty. A core question is, if human population numbers reach the projected levels, can the planet's carrying capacity support the tremendous growth of future food demand in terms of resources? It is predicted that aquaculture production will be the world's most significant food supplier making the oceans a major source of food in the coming years.

Even though aquaculture is considered as the world's fastest-growing food industry, further intensification and expansion of its production is needed to meet the increased future food demand sustainably.

As most of the species produced by aquaculture are farmed under intensive conditions, a considerable amount of additional aquafeed is also required to be supplied.

Therefore, aquaculture sustainable growth is heavily linked to the use of available and viable compound aquafeeds and subsequently to sustainable aquafeed ingredients.



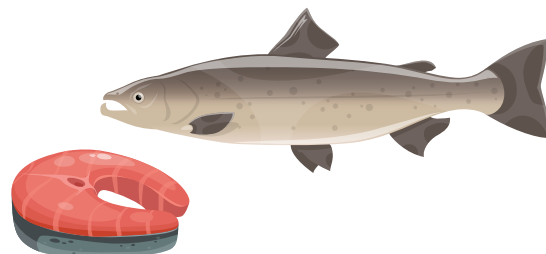
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### Aquafeed Sustainability - Far beyond FIFO

In 2015, the United Nations Assembly decided to respond more drastically to the global challenges in order to confront hunger, achieve food security and improve nutrition by 2030, with the adoption of 17 Sustainable Development Goals (SDGs) (UN, 2015).

Aquaculture as a food system that lies at the heart of SDGs must act holistically in order to be more productive and at the same time to be also more environmentally sustainable and resilient (FAO, 2018). Of paramount importance in terms of aquaculture's environmental impact and carbon footprint are the individual ingredients used in the aquafeeds, as aquafeed production is considered the denominating contributor to the environmental impact associated with aquaculture activities. Unquestionably, in the past, aquaculture sustainability was completely intertwined with the availability and the use of marine resources in the aquafeeds, i.e., fish meal and fish oil. Over the past three decades, the main goal in terms of aquaculture sustainability was to reduce dependency of aquaculture on marine resources. The goal was largely achieved over the last two decades by the considerable research progress recorded on fish genetics and nutrition. The latter contributed to the significant reduction of the use of marine resources in aquaculture, resulting in lowering drastically the ratio of wild fish inputs to farmed fish output (FIFO) by around 85% (0.28 in 2017 versus 1.97 in 1997) (Naylor et al., 2021). In fact, in recent years, the largest percentage of the raw materials used in the aquafeeds are of terrestrial origin and more specifically from plant sources.

Today more than ever, it is generally accepted that the sustainable growth of aquaculture is not solely dependent on the use of only the marine resources but rather is far more complicated equation which expands to the environmental, social, and economic impact that its activity might have on our planet and the future generations. Among the plant protein ingredients used in aquafeeds soy products have been the most used globally. Soy Protein Concentrate (SPC) has been the ingredient of choice in the diets of most carnivorous fish species worldwide and the single most used ingredient in salmon diets for many years (Aas et al., 2022).



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### CJ Selecta – Sustainability Initiatives

Since 1984, CJ Selecta has been pioneering the manufacture of soy products for various segments. The company is today one of the largest exporters of soy protein concentrate and a major supplier of the aquafeed industry worldwide. Through globally recognized certification standards such as Proterra for non-transgenic products (non-GMO), and since 2016 with being a member of the Round Table Responsible Soy standard (RTRS) for the transgenic soy products (GMO), the company aimed to ensure transparency throughout the production cycle and recognize the good practices of its suppliers.



CJ Selecta acknowledges the importance of sustainable development as the only way to conduct business and operate with high responsibility toward creating positive impacts on the environment and society. The company, except being a pioneer in the soy processing industry, is also recognized as a frontrunner through its initiatives and innovative services achieving its ambitious goals such as absolute compliance with soy Amazon moratorium and zero deforestation commitment in Cerrado (verified by MRV audit), ahead of schedule.

In addition, among the company's main aims was the reduction of its final product's (SPC) carbon footprint including the entire value chain from soybean cultivation up to the delivery of the product to the customers. The target was achieved through the

“Seed Project” which is a program launched in order to promote soybean production and sourcing in Minas Gerais (MG) state where CJ Selecta is located (far away from the Amazon biome) in close cooperation with farmers by providing the seeds (offering 26 varieties specifically adapted to the region of MG), the financing for the cultivation and the commitment to purchasing their entire soybean harvest. Today the participation and engagement of more than 300 farmers cultivating more than 95,000 hectares in the program led the company to record a value of carbon footprint below 30% the average value reported for the Brazilian industry (Figure 1).

Furthermore, regarding human rights and business ethics standards, CJ Selecta performs a due diligence project looking at the entire supply chain operations and activities. The project prioritizes identifying and understanding key potentials in positive and adverse human rights issues affecting rights holders, as well as challenges and recommendations to address them appropriately. Since 2015, CJ Selecta has been conducting the SEDEX Members Ethical Trade Audit (SMETA), which encompasses all aspects of responsible business practice, covering four pillars: Work, Health and Safety, Environment, and Business Ethics.

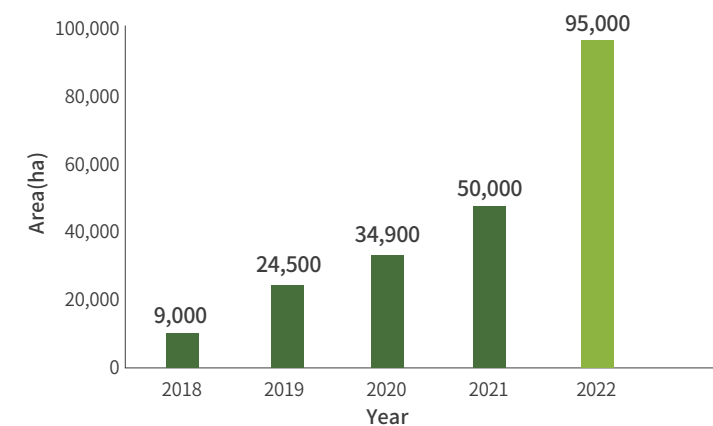


Figure 1. The evolution of Seed Project in terms of planted area expressed in hectares.

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### SoyTrace a new app developed by CJ Selecta for transparency and traceability

In 2022, CJ Selecta was the first and only SPC supplier to prove its commitment to transparency by launching a traceability service / application tool for its customers called “SoyTrace”.

The main purpose of the service is to increase transparency of soy products for customers and the consumer market.



The soy trace is a unique and secure per-app solution for CJ Selecta’s international aquafeed customers, offering convenient access to documents with traceability information on the exported non-GMO SPC, from origin to shipments. The application has an interface to this information, highlighting the topics of the TCC (traceability certificate of compliance) with more detailed information and a modern interface. Briefly, this would update the way CJ Selecta handles reports common to customers in terms of traceability, making it easier to access deeper/more useful information.

This brand-new service can be easily accessed by mobile application or website and will bring socio-environmental, quality, and logistics information. Customers will be able to access and download useful documents such as the Traceability Certificate of Compliance, Bill of Lading, and quality certificates. Every item will furnish useful information for the customer. Furthermore, it is an initiative that anticipates the strictest demands of European regulation - Green Deal. The EU new regulation which ensures that a set of key goods (including soy) placed on the EU market will no longer contribute to deforestation and forest degradation by continuous conduct of strict due diligence and will come into force on December 30, 2024. Meanwhile Brazilian agribusiness sector criticizes the EU decision, CJ Selecta has a dedicated focus on new technologies and innovative solutions to address this challenge. Soy Trace is the first step towards increasing transparency for customers’ soy products.

### Conclusion

Nowadays, aquaculture needs to comply with the established sustainability requirements in order to reduce its environmental impact, starting with the development and use of sustainable aquafeed and ingredients. Aquafeed sustainability extends beyond marine resources dependence, while the aquafeed ingredients must have reduced environmental impact and to be fully traceable. CJ Selecta’s SPC is unquestionably a fully traceable and sustainable aquafeed ingredient of choice for the aquafeed industry.





## References

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