



SIGHTLINE artificial intelligence app launched to improve fish production in Colombia

The multinational Sightline, a software company applied to the analysis of operational performance, launched in Huila 'AQUA Sightline', a mobile application through which fish farmers can measure water quality, feeding, mortality, biomass, inventory management and conversion factor, among others, to achieve better operational performance.



Caterin Manchola
huila@lanacion.com

The department of Huila, the largest fish producer in Colombia, was the epicenter for the launching of the mobile application of artificial

intelligence AQUA Sightline', by the U.S. multinational Sightline Systems, a company with more than 30 years of experience that plans to reach other aquaculture regions in the country, such as Antioquia, Córdoba, Nariño and Putumayo, to name a few.

Sightline Systems set its sights on Huila due to the significant increase of tilapia exports to the United States, for example, sales of fillets and other fish meats from Colombia to the U.S. rose by 42.8% during the year 2022, according to data from the Ministry of Commerce, and during the past year, Huila continued to be by far the leading fish producer with 39% of national production.

It is followed by Meta (11%) and Tolima (9%). In Colombia, fish farming accounts for 97.6% of aquaculture production, the remaining 2.4% is shrimp. That is why the Sightline Systems team visited the Betania dam and met with several businessmen to present the mobile application that aims to improve the operational performance of fish farmers and that, in addition, comes at a complex

for the sector due to the declaration of a sanitary national emergency due to the presence of the bacterium *Streptococcus agalactiae* ST7 la. It is important to highlight that "technological advances such as Artificial Intelligence (AI) and the interconnection of sensors, have expanded the possibilities for improvement in fish production. These technologies offer various ways to prevent losses, especially in

the management of water quality," said Laura Toro, Sightline's Senior Consultant. For example, 'AQUA Sightline' in addition to helping to comply with international standards, it can automatically receive telemetry produced by sensors in cages to real-time monitoring of health and water quality in high-production operations such as IPRS. Toro pointed out that water temperature and quality of water are among the most important in fish

production and influences both larvae, fry and adults. But implementing the technologies is precisely one of the biggest challenges that the sector is facing, she added. And in that sense, so is "producing fish of excellent quality, to maintaining a good cost-benefit ratio, maintaining quality standards to increase export and achieve an intensive production while protecting the environment.



Brandon Witte, CEO; Gilad Gat, Chairman of the Board; Rolin Zumarán, Senior Vice President; and Laura Toro, Sightline Systems Senior Consultant visiting customers at the dam.

How the application works

By means of 'AQUA Sightline', it is possible to monitor the operational performance of the culture of any type of fish reared in production farms such as salmon, tilapia, trout or cachama, as well as other options such as shrimp or other species; proactively using a mobile phone, tablet, or laptop.

According to Rolin Zumarán, Senior Vice President of Sightline Systems, the 30-year track record of

Betania Dam, in Huila, southern Colombia.



The Sightline Systems team presented the 'Aqua Sightline' application. In the future, the objective is to settle in the region.



The powerful application, which works even without a permanent internet connection, was introduced to Huila's fish farmers.

...the information that can be managed in the application includes: monitoring contamination levels, water quality, feeding, mortality, biomass, inventory management and conversion factor, among others, in order to take quick action. In short, the tool begins to offer the farmer "two important elements in the fish farming process: alerts and visualizations. Two incredibly important information elements in operational performance management because of the benefits they provide: better quality and cost/benefit". As a digital resource, it helps fish farmers in Huila, for example, to do their sampling and immediately know the current results versus the farmer's expectations. Also to know "when something in the environment or cage changes negatively in the development of the fish" to act and avoid losses, he emphasized. We all "want high quality fish, produced at the best price, with consistent export quality. Alerts and

visualizations based on continuous analytics are beginning to support that shift in aquaculturists seeking continuous improvement: the shift from being 'Reactive' to being 'Proactive' in their operations," he said.

Easy to use

Although new technologies can be intimidating for producers, Gilad Gat, Chairman of the Board of Sightline Systems noted that the application is specially designed to be very simple to operate, requiring only a cell phone. In addition, "we help producers produce high quality, reliable and profitable fish while at the same time helping to optimize

operations by proactively troubleshooting problems, improving product quality, conversion factor and ultimately increasing profit." He complemented that the AQUA APP is licensed under the cloud subscription model on a monthly basis. With the launch of AQUA Sightline in Huila for the rest of 2023 "our licensing prices are minimal to be able to offer that any producer can have access to the application. Our team here in Neiva can assist any producer interested in subscribing.

The company

Sightline Systems is present as a company in Japan, Chile, Colombia, the United States and London. It is a software organization applied to operational performance analysis that was born in the United States over more than 30 years ago, contextualized Brandon Witte, CEO of Sightline.

Already in use in Chile

Gilad Gat complemented that at a Chilean salmon farm, his app 'AQUA sightline' collected operational and sensor data to evaluate and improve fillet quality and profitability. "This case demonstrates AQUA's effectiveness in optimizing aquaculture operations," he said.

Aquaculture is the most dynamic sector globally, experiencing an average growth rate of 8.8% over the last three decades. Huila, for its part, during the last decade recorded a growth rate of 9-10% per year on average, according to the Secretary of Agriculture.



Edison Javier Henao Palacios, Technical Secretary of the Fish Farming Chain of the department of Huila with Gilad Gat, Chairman of the Board of Sightline Systems.

