

The anchovy cull: Peru relaxed fishing for juveniles without scientific support

LEGALIZED. In Peru, fishing for juvenile anchovies has been legalized in practice for almost eight years. The regulation allowing this was not recommended by IMARPE.

Illustration: OjoPúblico / Jafeth Ruiz Pianchachi

At the end of 2016, the Ministry of Production (Produce) issued a controversial decree that eliminated sanctions for fisheries that contained more than 10% juvenile anchovies in their catches. After a year of investigation and access to official documents, this report reveals that the Peruvian Marine Institute (IMARPE) did not recommend the measure. On the contrary, it proposed more oversight. Since the regulation went into effect, more than 3 million tons of smaller anchovies have been caught.



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The anchovy is extremely fragile. If this small fish is handled repeatedly, its flesh becomes damaged and literally destroyed. Something similar happens with its fishery: if it's not managed responsibly, it collapses, as has already

happened in Peru.

Between 1961 and 1972, the country had an annual anchovy biomass of approximately 17 million tons. However, between 1975 and 1984, this decreased by more than 80%, to just 3,300,000 tons. What happened? The Peruvian Marine Institute (IMARPE) maintains that this dramatic reduction in schools was due to the El Niño phenomenon and overfishing, which was prevalent at the time.

The suspension of this fishery between 1983 and 1985, along with other more or less drastic measures to regulate the intensity of fishing, allowed for its gradual recovery, according to a 1996 Imarpe bulletin.

However, for almost eight years now, since Supreme Decree 024-2016-PRODUCE, a regulation was issued that effectively legalized the fishing of juvenile anchovies, the species has faced new risks: since then, the smallest anchovies, along with others of suitable size, are extracted and converted into fishmeal for export, long before they can reproduce or fulfill their role as food for other fish, birds, or marine animals.

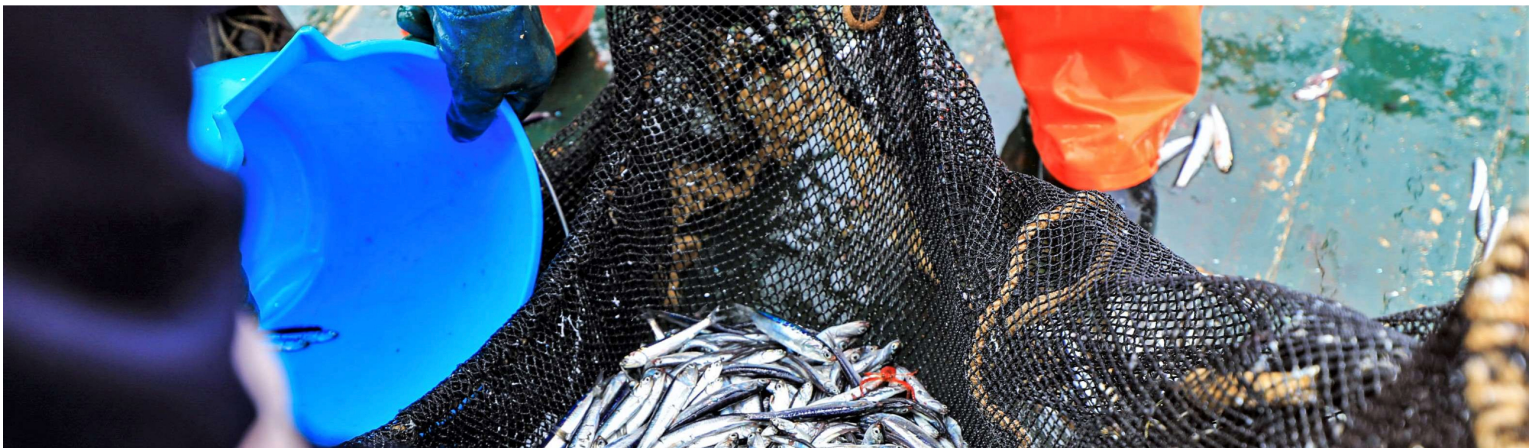
6 THE PERUVIAN MARINE INSTITUTE DID NOT RECOMMEND EASING JUVENILE ANCHOVY FISHING.

According to various experts and industry leaders consulted, the companies that have quotas for anchovy fishing are the ones that benefit from this situation. These include the seven largest fishing companies in the country, members of the National Fisheries Society (SNP).

Tras revisar documentos oficiales, **OjoPúblico** determinó que la legalización de la pesca de estos pequeños peces —con el fin, según el Ministerio de la Producción (Produce), de evitar sus descartes en el mar— no contó con el respaldo del Imarpe, organismo técnico especializado, cuya opinión es indispensable en la emisión de normas del sector. Por el contrario, este recomendó un mayor control para evitar la pesca de juveniles.

In parallel, a legal consultancy—commissioned by this newspaper—analyzed the decree, issued in November 2016, and determined that, rather than preventing the overfishing of small anchovies, it actually encourages it. In fact, in just seven years and eight months, more than 3 million tons of these small fish were caught, according to data from Oceana Peru, analyzed by this newspaper.

To discourage discards, concluded the legal report by international law specialist Nicholas Fromherz, all that was needed was to implement surveillance and on-board inspectors. Peruvian and foreign experts consulted for this report agree.





PREDATION. Since Supreme Decree 024-2016-PRODUCE was issued, more than 3 million tons of juvenile anchovies have been caught in Peru.

Photo: Produce

Without scientific support

IMARPE is a specialized technical agency of Produce. Its main function is to generate scientific knowledge so that the Peruvian government can make decisions that ensure the sustainable use of aquatic species.

To support the issuance of Supreme Decree 024-2016, Produce pointed out that the discarding of juvenile anchovies at sea, a practice used by vessels to avoid economic sanctions, was a serious problem for this fishery, the most important in Peru and the world.

Until then, if a vessel caught more than 10% of juveniles, it would be subject to a fine. However, the Ministry pushed for the decriminalization of such catches, and after the regulation was issued, if a vessel reported having caught juveniles above the permitted limit (10%)—or even if it reached 100%—it would no longer be penalized upon reporting it.

6 SINCE THE DECREE WENT INTO EFFECT, THE INDUSTRY HAS CAUGHT MORE THAN 3 MILLION TONS OF JUVENILE ANCHOVIES.

Marco García León, a Chilean lawyer and consultant on maritime law and ocean governance, explains that decriminalizing the capture of juveniles goes against the global trend and could lead to overexploitation of the species. "For a decree to be functional and effective, it must include clear and enforceable sanctions that ensure compliance with regulations," he says.

Antony Apeño Arias, biólogo marino responsable del Programa de Gobernanza Marino Costera de CooperAcción, tiene una opinión similar: "Se está atentando no solo contra la especie, sino contra las otras especies que dependen de esta. Esto va a llevar a un colapso (...). Estamos yendo por un camino que podría ser irreversible", advierte.

SIN PESCA. Debido a que la anchoveta no se encontraba en tamaño adecuado, en 2023 no hubo primera temporada de pesca en la zona norte-centro.

Foto: OjoPúblico

OjoPúblico consultó a Produce si el Imarpe recomendó la flexibilización de la captura de juveniles previo a la emisión del cuestionado decreto, entre otros aspectos. Sin embargo, la cartera no se pronunció sobre el tema.

NO FISHING. Because the anchovy was not of adequate size, there was no first fishing season in the north-central region in 2023.

Photo: OjoPúblico

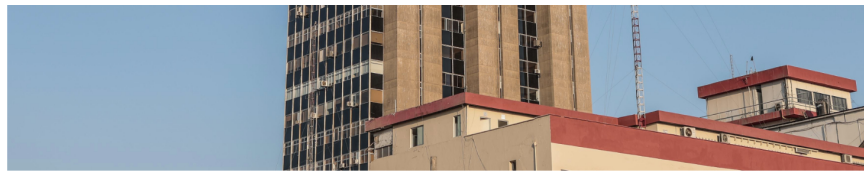
OjoPúblico asked Produce if Imarpe recommended easing the capture of juveniles prior to the issuance of the controversial decree, among other aspects. However, the ministry did not comment on the matter.

This media outlet also requested from IMARPE—invoking the Transparency Law—the technical document it prepared for the issuance of the regulation. It thus obtained two reports: *Current Situation of the North-Central Peruvian Anchovy Stock and Exploitation Prospects*, from April 2013, and *Anchovy Fishing Projections in the North-Central Region*, from October 2012. These documents were issued three to four years before the decree went into effect.

According to Produce, these documents concluded that discarding smaller specimens at sea was significantly affecting "the anchovy population." However, the documents briefly mention the issue, and none of them considered the possibility of increasing the tolerance for fishing juveniles to reduce the practice. Quite the contrary: they recommended strengthening controls to prevent the capture and release of smaller species.

The draft Supreme Decree also referred to a report from the General Directorate of Fisheries Policy and Development, dated September 2016. It also cites two other IMARPE reports on juvenile discards. OjoPúblico also accessed them through the Transparency Law.





NO RESPONSE. For Produce, Supreme Decree 024-2016 is meeting its objectives. Therefore, it has no plans to modify it.

Photo: OjoPúblico

The first, from 2013, stated that the most common way to avoid discarding is to allow a tolerance percentage for juveniles. However, after analyzing the possibility of increasing the limit, it recommended keeping it at 10%.

The second document analyzed three strategies for reducing discards. In the first, IMARPE explained that a mathematical simulation had concluded that the practice was reduced "as tolerance increases." To reduce discards by 50%, for example, a 37% tolerance for juvenile fishing would have to be applied. And if the goal was to reduce discards by only 25%, it would be enough to increase the tolerance to 22%.

La segunda estrategia evaluada planteaba la despenalización de la captura de juveniles, pero solo para el primer día de pesca, de los de alrededor de 60 que suele tener una temporada. Esto con el objetivo de recabar información y cerrar zonas con alta incidencia de peces pequeños.

La tercera y última estrategia estudiada sugería implementar un monitoreo más eficiente, con observadores del Imarpe e inspectores de Produce a bordo de los barcos industriales. Para eso —precisaba el documento— se requerían entre 271 y 319 profesionales. Aunque Imarpe dijo que las tres posibilidades eran aplicables y podían ayudar a evitar los descartes, al final, recomendó la última.

Anchoveta en peligro

Perú ha legalizado la pesca de juveniles a cambio de datos



2001

Perú restringió la pesca de ejemplares juveniles

¿Qué pasa si se captura accidentalmente?

Las embarcaciones pueden capturar hasta un 10% de pequeñas anchovetas por faena. Si superan ese límite, los dueños de las embarcaciones deben ser sancionados.

2016

El Ministerio de la Producción emitió una norma que, en la práctica, legaliza la pesca de anchovetas juveniles. A cambio de información de áreas de pesca con exceso de tallas menores, ya no se les aplica la multa.

Desde entonces, las grandes pesqueras peruanas capturan miles de toneladas de juveniles al año, que terminan convertidos en harina y aceite de pescado.

La producción de aceite y harina de pescado genera ingresos de aproximadamente

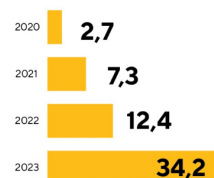
USD 1.700 millones al año para la industria peruana.

Este pequeño pez alcanza su madurez y se reproduce al año de vida, cuando tiene 12 centímetros de talla o más

Anchoveta juvenil

Anchoveta adulta

Captura de juveniles en peso (%)*:



*DEL TOTAL PESCADO EN LA SEGUNDA TEMPORADA

La pesca en exceso de anchovetas en tallas menores también afecta la alimentación de otros peces, aves y animales marinos.

Los pescadores artesanales y otras personas también resultan perjudicados: la escasez de anchoveta repercute en la alimentación y disponibilidad de otros peces populares en los hogares, mercados y restaurantes.



La pesca de juveniles de anchoveta en Perú está poniendo en riesgo su población.

6'450.383 toneladas



“We have been promoters”

Officially, Supreme Decree 024-2016 was promoted by Produce. However, the National Fisheries Society (SNP)—a business association that includes Peru's most important industrial fishing companies—has also played an important role.

This was acknowledged in 2019 by Jorge Risi Mussio, general manager of the business association, during an interview with **OjoPúblico** for a report that **highlighted** the excessive harvesting of juvenile anchovies. "Has any evaluation been done of the regulation [Supreme Decree 024-2016-PRODUCE]?" the outlet asked. "We, in fact, have been promoters of this system," **the executive responded**.

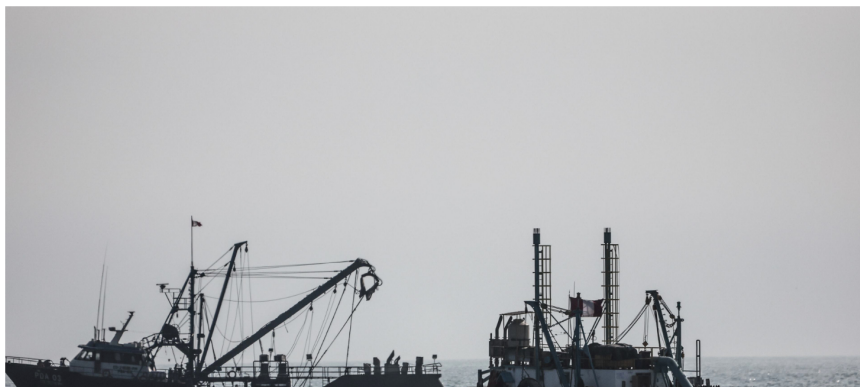
Last June, **OjoPúblico** sent a questionnaire to the SNP, asking, among other things, if it had any comments on Risi Mussio's statement. No response was received on this point. The union only stated, in general terms, that the formal fishing industry is the most interested in protecting anchovies and the marine ecosystem, as their survival depends on the sustainability of the resource.

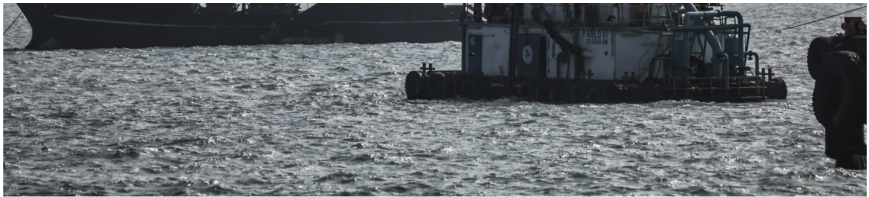
"THIS IS NOT ONLY AN ATTACK ON THE SPECIES ITSELF, BUT ALSO ON THOSE THAT DEPEND ON IT. THIS WILL LEAD TO A COLLAPSE," SAYS MARINE BIOLOGIST ANTONY APEÑO ARIAS.

Although the SNP has denied it, union leaders and industry experts assert that the business association is promoting and pressuring Produce to issue regulations on the anchovy fishery that benefit them.

In February 2012, after being removed from her position as Minister of Production, Gladys Triveño Chanjan stated that her departure was due to pressure from the business community.

"I once asked one of the representatives of these companies why they reacted so strongly to the ordinance. And he said: 'It took us so long to have the capacity to influence the sector, and suddenly, you arrive without being an expert, and in two months, you take away our ability to control the sector. It's going to be very difficult for them to forgive you,'" **he said** at the time.





BENEFITED. The relaxation of juvenile anchovy fishing benefits the fishing industry, union leaders and specialists maintain.

Photo: OjoPúblico



EXPORT. In Peru, there are no incentives to avoid catching juvenile anchovies because they can also be converted into fishmeal for sale to the foreign market.

Photo: OjoPúblico

It is not necessary to sacrifice small anchovies

An analysis by **OjoPúblico** —based on data from Oceana Perú—shows that, from November 2016, when Supreme Decree 024-2016-PRODUCE was issued, until the second season of 2023, at least 3,310,000 tons of juvenile anchovy had been caught.

Could this problem have been avoided? According to a contextual and comparative analysis of Peruvian regulations with the legislation of other countries, yes. "Peru uses orthodox regulatory tools to reduce the capture of juvenile anchovies," indicates the report prepared by international law attorney Nicholas Fromherz.

Anchoveta juvenil capturada de noviembre de 2016 a enero de 2024

Desde que se emitió el Decreto Supremo 024-2016-PRODUCE, se han extraído más de 3'300.000 de anchovetas en tallas menores.

Temporada	Cuota total	Cuota pescada (tn)	% Juvenil (peso)	Cantidad juvenil (peso)
II-2016	2 000 000	1 959 592	18	347 601
I-2017	2 800 000	2 372 098	14	331 145

II-2017	1 490 000	687 577	15	101 074
I-2018	3 316 700	3 145 082	9	283 057
II-2018	2 100 000	2 059 000	3	65 880
I-2019	2 100 000	2 054 000	11	227 994
II-2019	2 786 000	1 002 388	6	64 855
I-2020	2 413 000	2 364 120	8	181 801
II-2020	2 780 000	2 450 522	3	66 164
I-2021	2 509 000	2 466 847	11	281 961

**El % y peso de juveniles en algunos casos no coincide porque hubo una pequeña cantidad de calas que no se muestrearon.*
 Tabla: OjoPúblico • Fuente: Produce/Imarpe/Oceana • [Descargar los datos](#) • Creado con [Datawrapper](#)

While the amnesty encourages data collection, explains the adjunct law professor at Lewis & Clark College in Portland, Oregon, “it does very little to reduce excessive catches [of juveniles] per se, and may even encourage them because they don't incur a fine, and [the small fish] have an economic value.” Indeed, these specimens also end up converted into fishmeal and fish oil.

Hugo Castrejón Mendoza, a Mexican marine biologist and researcher at the University of the Americas, expressed concern about the consequences of this regulation. “It's not advisable to exploit them [the smaller anchovies] because we would be affecting the population's reproductive potential in the medium and long term,” he warned.

International examples

When comparing anchovy regulations with those of other species abroad, attorney Nicholas Fromherz found no regulations in any other country that decriminalize the fishing of juvenile aquatic species.

The Danish fishmeal and fish oil industry, for example, is based primarily on catches of sprat, sand eel, blue whiting, and herring. It is subject to the total landing obligation mandated by the European Union's Common Fisheries Policy. In other words, discarding at sea is prohibited.



ÚNETE AQUÍ

In addition to complete landings, the European Union's Common Fisheries Policy establishes monitoring, control, and surveillance. Among other measures, this includes the mandatory use of closed-circuit television on all vessels measuring 18 meters or longer that may pose a risk of noncompliance.

The United States, for its part, is a small producer of fishmeal and fish oil. Its regulations do not contain any elements similar to the Peruvian amnesty for catches exceeding the quota and have on-board supervision, with human observers or video monitoring, the specialist points out.

PROVISIONS DECRIMINALIZING JUVENILE FISHING IN ANOTHER COUNTRY.

Another mechanism used worldwide to reduce the harvest of juvenile species is incentives for those who avoid this bad practice. The United States has a bluefin tuna bycatch regulation that rewards vessels whose accidental catch levels are lower than permitted with an additional quota. Across the Atlantic, Scotland rewards vessels that reduce their cod bycatch with additional fishing days.

For this reason, Fromherz recommends “implementing onboard video monitoring for the entire industrial fleet, a clear mandate that a vessel must immediately move to another fishing area as soon as a catch above the tolerance is detected, and a reward system for vessels that catch juveniles significantly below the tolerance level.”

In this context, environmental lawyer Marco García León maintains that video surveillance and on-board observers have proven vitally important in combating illegal, unreported, and unregulated (IUU) fishing. “And they can certainly contribute to reducing incidental catches of juvenile anchovies,” he said.

Video surveillance not only prevents overfishing of juveniles and discards at sea. It can also benefit the industry by allowing it to prove the traceability of its products, says Mexican biologist Hugo Castrejón Mendoza.

This onboard control mechanism is established in Supreme Decree 024-2016-PRODUCE. The regulation stated that its implementation would be gradual. However, almost eight years after the decree was issued, it has not been implemented. When asked about this, the ministry stated that any regulatory measure has room for improvement, “as long as it does not constitute a barrier to market access for economic agents.”



CONSERVATION. The minimum size for anchovy fishing is 12 centimeters, once it has reached sexual maturity and reproduced.

Photo: Abigail Díaz

Frustrated modification

In October 2021, **OjoPúblico** revealed that vessels, protected by the amnesty for juvenile fishing, were harvesting these small fish in several consecutive coves and in the same fishing area. Given this evidence, Produce announced it would evaluate the impact of Supreme Decree 024-2016.

Six months later, in April 2022, the Executive published **a draft supreme decree** seeking to modify the regulation. Specifically, it sought to establish minimum distances for vessels to move when juvenile fishing is detected.

IMARPE's recommendations—including in the **draft supreme decree**—suggested measures based on three scenarios: fishing in areas with low, medium, and high presence of juveniles.

In the first of these, if an excess of juveniles was caught, the vessel had to move out three to nine miles to re-set the target. In the second, it had to move out 17 to 25 miles, and in the third, it had to abandon the fishing zone and close it.



AFFECTED. Artisanal fishermen are also affected by overfishing of juvenile anchovies.

Photo: Abigail Díaz

Although the draft was given a 15-day period for collecting comments, it never became a standard. Last June, when contacted by this newspaper, the ministry stated that, three years ago, IMARPE evaluated the impact of the supreme decree and the result was that "there is a lower incidence of juvenile discards."

He added that all regulations can be modified, but that this specific one has yielded "good results" and "is adequately fulfilling (...) the objective of making anchovy fishing sustainable."

Marine biologist Antony Apeño Arias, on the other hand, believes it should be repealed. "There is no basis to support allowing the industry to harvest large numbers of juveniles (...) We are on a path that has reached the breaking point," he said.

Union representatives, meanwhile, have differing positions: the Chimbote and Annexes Fishermen's Union believes the decree should be repealed, while the José Olaya Balanda Chimbote Fishermen's Union believes it should be adapted through a process involving fishermen, fishing captains, Imarpe, and Produce.

Conflicts of interest in Imarpe

The movement of public officials and servants from the state to private companies or organizations in the same sector, and vice versa, is known as the revolving door.