

Something fishy on the table: Why Goa is gripped with the fear of fish contaminated by formalin

A fear of fish contaminated by the preservative formalin has spread across several states. What's going on?

Written by [Smita Nair](#) | Panaji | Updated: July 19, 2018 9:21:56 am



A fisherman gestures as he holds a fish in Mumbai. (Express Photo by Karma Sonam Bhutia/File)

Goa Chief Minister [Manohar Parrikar](#) Wednesday announced a 15-day ban on the entry of fish from other states, and ordered border checks to stop trucks bearing fish from outside. The action came a day before the Assembly's monsoon session, and after over a week of the state being gripped with the fear of fish contaminated by formalin.

How scare started

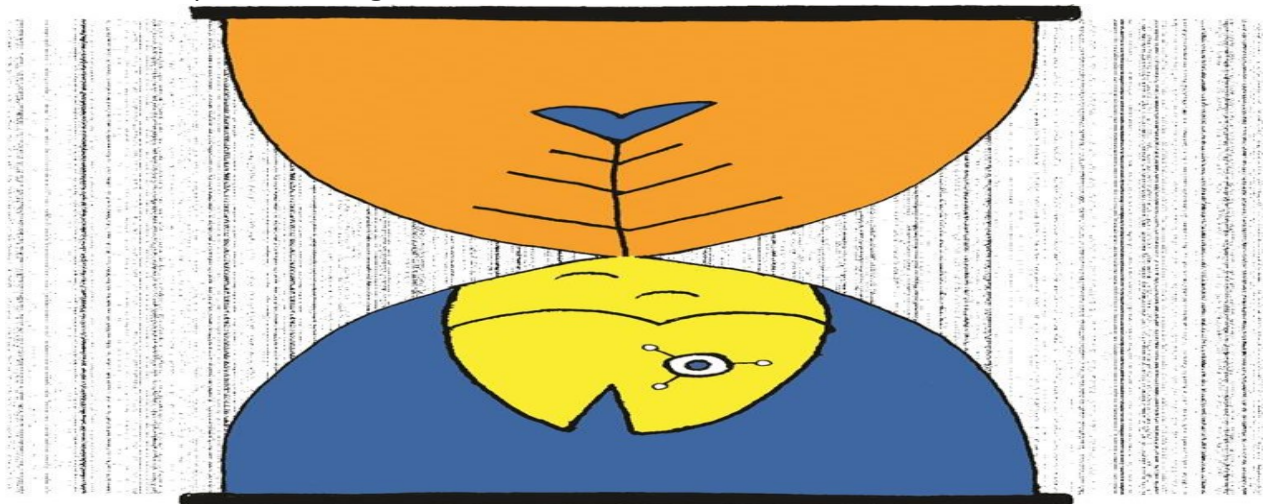
At 3.30 am on July 13, officials from the state Food and Drug Administration raided markets in South and North Goa, and picked up samples from 17 trucks carrying fish from Kerala, Tamil

Nadu, Odisha, Andhra Pradesh, and Karnataka. The samples included mackerel, sardines, rockfish, clams, ladyfish, prawns, and white pomfret.

As fish traders protested, Agriculture Minister Vijai Sardesai tweeted that afternoon: “Any knee-jerk action aimed at creating panic is uncalled for.... Thankfully FDA has now confirmed that reports indicate fish showing no trace of formalin and hence #safe...”

The FDA, however, issued a statement in the evening, saying the seized fish did indeed contain formalin — though “within permissible limits”. It said the samples, brought to their lab on a “war footing”, had confirmed the presence of “formaldehyde”, a chemical which, in a compound with water and a stabiliser, is commonly referred to as formalin.

On July 14, Parrikar himself posted on Twitter: “I am personally monitoring the issue of “Formalin in Fish” and have directed FDA to seize all trucks carrying such fish or any other food items... and to punish & bring all such violators to face the law.”



An FSSAI advisory clarified that “formaldehyde, the laboratory name for formalin, is not permitted for use in foods as per Food Safety and Standards Regulation, 2011”. (Illustration: C R Sasikumar)

Before Goa, elsewhere

The first reports of formalin-laced fish came from Kerala. On June 24-25, the Kerala Food Safety and Fisheries Departments in a joint raid seized 9,600 kg of contaminated fish at Arayankavu in Kollam district. Separately, 6,000 kg of contaminated fish was seized at Walayar in Palakkad district. In Kanyakumari, Tamil Nadu officials have been carrying out raids almost every other day for the last two weeks, but laboratory tests have so far returned negative for formalin.

Lajid K K, Assistant Director, Fisheries, Ernakulam, said the formalin scare is not a “new alert”. Samples had been first picked up two years ago. “Consumers were approaching us, saying the fish didn’t smell and didn’t decompose even outside the fridge. There was even a complaint saying fish remained fresh on the dining table for two days,” Lajid said. Kerala, which consumes around 10,000 tonnes of fish every day, has been carrying out a storm of raids under its umbrella fish safety and hygiene campaign, Operation Sagar Rani. And the Kochi-based Central Institute of Fisheries Technology (CIFT) has now developed a detection kit for formalin — paper changes colour if rubbed on fish laced with the chemical — that is in use in several states.

The Andhra connection

A Kerala FDA official said fish trucks from Andhra Pradesh, which sometimes use fake Kerala registration plates, often contain a formalin-laced cargo. “They have to have ice and fish in the ratio of 1:1, but even then, the distance is long, and fish tends to spoil. Formalin helps delay decomposition,” the official said.

According to officials across three states — Tamil Nadu, Kerala, and Goa — aquaculture harvests from Andhra Pradesh tend to have the biggest chances of formalin contamination. The state has around 4,000 hectares under aquaculture, which produces harvests in the monsoon, when trawlers from most states do not go to sea, and supplies dry up.

Kerala officials recalled a case of Vannamei shrimp, an export variety from Andhra, which was sold at an inflated price of Rs 350 per kg, and remained good for consumption for over 15 days compared to its normal shelf life of two. On another occasion, the price of freshwater Andhra tilapia was seen to go up three times to Rs 180 per kg. Kerala officials have sent a communication to their Andhra counterparts, expressing apprehensions about middlemen using the chemical on the fish.

Supplies from Andhra have been suspected by officials in Assam as well who, incidentally, imposed a ban on the entry of fish from outside even before Goa.

The offending chemical

Formalin is a preservative mostly used in forensic museums and morgues where autopsies are conducted. Dr Shailesh Mohite, forensic chief of Mumbai’s Nair Hospital, said formalin is used to harden human tissue for post mortem examinations. “It tightens the cellular architecture, and is used in forensic museums. In morgues, we use formalin to ensure the specimen doesn’t decompose,” he said.

Dr Mohite was clear that formalin “should never be consumed by humans”. Even in laboratories, he said, “we use only a 10% solution, so with 900 ml of water, we use 100 ml of the chemical”.

Formalin could also be carcinogenic, doctors said. Pawan Kumar Agrawal, CEO of India’s food safety regulator, Food Safety and Standards Authority of India (FSSAI), said there is “no permissible limits for formalin”, thus refuting the Goa FDA’s claim. An FSSAI advisory clarified that “formaldehyde, the laboratory name for formalin, is not permitted for use in foods as per Food Safety and Standards Regulation, 2011”. According to FSSAI, the most common reasons for “dishonest traders” using formalin is the “unavailability of good quality ice at harvest centres, inadequate insulation during domestic transport and lack of warehousing facility for bulk storage of fish”, besides the easy availability of the chemical.