Five years into the 10-year fishing ban, flagship species rebounds in the Yangtze River (Changjiang)

The Innovation Water News Team*
*Correspondence: water@the-innovation.org

Received: February 5, 2026; Accepted: February 7, 2026; Published Online: February 12, 2026; https://doi.org/10.59717/j.xinn-water.2026.100002

Citation: The Innovation Water Editorial Team, China (2026). Five years into the 10-year fishing ban, flagship species rebounds in the Yangtze River (Changjiang). *The Innovation Water* **1**:100002.

Five years after China imposed a landmark 10-year fishing ban across key waters of the Yangtze River basin, official assessments indicate sustained improvements in biodiversity, with signs that the country's longest river is gradually recovering its ecological vitality.

At a press conference held by the State Council Information Office on January 30, authorities said the "10-year fishing ban", which took effect on January 1, 2021, has begun to deliver measurable ecological results, including the recovery of endangered species, improved fish diversity and more effective enforcement against illegal fishing.

The Yangtze River, often referred to as China's "mother river" alongside the Yellow River, supports more than 40 percent of the country's population and economic output. Decades of overfishing, pollution and habitat degradation, however, had pushed its aquatic ecosystem almost to the brink. The fishing ban, being supported by highly developed aquaculture,[1] covering major tributaries and protected areas along the river, marked one of the most ambitious freshwater conservation efforts in the country's history.[2]

Figure 1. A male Yangtze finless porpoise named Hanbao, born in 2020 at the Baiji Dolphinarium of IHB, CAS.

Zhang Zhili, Vice-Minister of the Agriculture and Rural Affairs, said the fishing ban has been implemented through a coordinated governance framework led by his ministry, with close collaboration among multiple central government departments plus 15 provinces and municipalities along the Yangtze river.

"The policy design has undergone continuous innovation, and institutional mechanisms have gradually improved", Zhang said, noting that the effort has already achieved "phased progress and significant results."

To objectively evaluate the impact of the ban, the Ministry of Agriculture and Rural Affairs commissioned a mid-term assessment by research teams from Fudan University, the Chinese Academy of Sciences and other institutions. The findings were compiled into a series of reports, including *Exploratory Practices, Pattern Recognition and Policy Recommendations for the Yangtze Ten-Year Fishing Ban*, which detail ecological changes observed since 2021.

YANGTZE FINLESS PORPOISE: A BELLWETHER SPECIES

The assessment places particular emphasis on the Yangtze finless porpoise, the river's only extant freshwater cetacean and a flagship species whose population trends are widely regarded as an indicator of overall

ecosystem health (Figure 1).

Scientific surveys conducted by the Chinese Academy of Sciences and the Chinese Academy of Fishery Sciences show that the porpoise population fell sharply from around 2,700 individuals in the early 1990s to just 1,012 in 2017, reflecting decades of human disturbance.

The trend, however, has begun to reverse. A special survey found that the population increased to approximately 1,249 individuals in 2022, marking the first recorded rebound, and further rose to 1,426 by 2025, achieving what officials described as "stable growth".

In recent years, sightings of finless porpoises have become increasingly common in sections of the river near major cities such as Wuhan and Nanjing, where residents have reported seeing the animals swimming and surfacing close to the riverbanks.

Despite these encouraging signs, the assessment cautions against complacency. The porpoise population remains at roughly half of its level in the 1990s, and the species is still classified as critically endangered. Risks from extreme weather events, climate variability and ongoing human activity persist.

To address these challenges, the Ministry of Agriculture and Rural Affairs said it will continue strengthening in-situ conservation, expand ex-situ conservation populations and accelerate breakthroughs in captive breeding. Authorities have set targets of increasing the wild population to 1,700 by 2030 and 2,000 by 2035.

OVERALL IMPROVEMENTS IN AQUATIC BIODIVERSITY

Beyond the Yangtze finless porpoise, the fishing ban has had a broader impact on aquatic biodiversity across the Yangtze basin.

Historical records indicate that the river once supported 194 endemic fish species, of which 127 were restricted to upstream waters. Data from a basin-wide monitoring network show that species diversity among endemic fish has continued to rise over the past five years, with distribution ranges gradually expanding.

Between 2021 and 2025, monitoring efforts recorded 134 endemic fish species, or an increase of 25 compared with the period before the ban. Several species that had become extremely rare due to overfishing and habitat destruction, such as *Ochetobius elongatus* (Kner) have begun to reappear in monitoring data, and the continuity of species distribution has improved markedly.

Conservation and restocking programs have also made progress. The annual release of Chinese sturgeon exceeded one million individuals for two consecutive years, while experimental natural spawning of the Yangtze sturgeon has achieved success, marking a critical step toward rebuilding wild populations.

Overall fish diversity has increased as well. From 2021 to 2025, a total of 351 fish species were recorded across the basin, 43 more than before the fishing ban. The long-standing trend toward smaller average fish size—often associated with overexploitation—has been effectively curbed, and the index measuring aquatic biological integrity has risen significantly.

"These changes are being felt at the community level", the report notes, citing feedback from residents along the river who say that "there are more fish in the Yangtze now, and they are bigger".

BOTH ECOLOGICAL AND SOCIAL GAINS

Officials emphasized that ecological gains would not have been possible without sustained enforcement. Over the past five years, agricultural and rural affairs departments at all levels have worked closely with public security and market regulation authorities to conduct joint law-enforcement operations, targeting illegal fishing, transportation and sales networks.

As a result, violations related to fisheries have declined, and illegal fishing activities have been effectively contained. Advanced technologies such as radar-based video surveillance, drone patrols and intelligent monitoring systems are now widely used along the river, significantly improving enforcement efficiency and coverage.

At the same time, public awareness campaigns have intensified. Through legal education initiatives and case-based outreach, authorities have sought to strengthen public understanding of the fishing ban. Along the river, more volunteers have joined patrol teams to help protect fisheries, fostering what officials describe as a growing culture of "protecting the Yangtze together".

Ensuring the social sustainability of the fishing ban has been another key pillar of the policy. Authorities have established detailed records for approximately 231,000 fishers who exited the industry as a result of the ban, adopting tailored support measures.

According to the Ministry of Agriculture and Rural Affairs, all eligible former fishers have been enrolled in pension schemes, while those with the capacity and willingness to work have largely transitioned to new forms of employment. Overall incomes among former fishing households have remained stable.

For those facing sudden hardship, targeted assistance measures, including access to minimum living allowances and inclusion in poverty-prevention monitoring programs, have been implemented to ensure basic living standards.

COMMITMENT TO LONG-TERM IMPLEMENTATION

Despite the progress, officials acknowledged that restoring aquatic biodiversity in the Yangtze is a long-term and gradual process. Enforcement still faces weaknesses in some areas, and support for former fishers requires continued attention.

"The achievements should not obscure the challenges", the Ministry of Agriculture and Rural Affairs said in a statement. "Protection and restoration efforts must be sustained".

Looking ahead, the ministry said it remains firmly committed to the ten-year fishing ban, pledging to further refine long-term mechanisms, strengthen joint enforcement, enhance conservation and restoration capacity, and fully implement resettlement and support policies.

By safeguarding aquatic biodiversity at a high standard, officials said, China aims to support the high-quality development of the Yangtze River Economic Belt, thus harmonizing biodiversity, environment, and economic growth[3] along one of the world's most important river systems.

REFERENCES

1. Gui J. (2024). Chinese wisdom and modern innovation of aquaculture. *Water Biology and Security* **3**:100271. DOI:10.1016/j.watbs.2024.100271
2. Wang H.-J., Wang P.-Z., Xu C., et al. (2022). Can the "10-year fishing ban" rescue biodiversity of the Yangtze River. *The Innovation* **3**:100235. DOI:10.1016/j.xinn.2022.100235
3. Kong X.-Z., Wang Z.-Y., Wang H.-J., et al. (2025). Harmonizing biodiversity, environment, and economy: A coordinative framework for aquatic conservation. *The Innovation* **6**:101071. DOI:10.1016/j.xinn.2025.101071

FUNDING AND ACKNOWLEDGMENTS

We thank Prof. Zhigang Mei and Xiaodong Sun for providing the picture of Yangtze (Changjiang) finless porpoise.

DECLARATION OF INTERESTS

The author declares no competing interests.