

## **"Giant" Fish-Breeding Forest: A new environmental system linking continental watershed with open water**

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The Amur–Okhotsk Project (AOP) attempted to create a new global environmental concept referred to as the “Giant” fish-breeding forest (GFBF) by expanding the traditional Japanese idea of Uotsuki-Rin (fish-breeding forest), which related upstream forest with the coastal ecosystem both physically and conceptually. The AOP found that primary production in the Sea of Okhotsk and Oyashio region depended on dissolved iron transported from the Amur River and its watershed. Therefore, the Amur River basin can be recognized as the “Giant” fish-breeding forest of the Sea of Okhotsk and the Oyashio region. This hypothesis presents new perspectives in global environmental issues: an ecological linkage between the continent and open sea, the relating less dependent stakeholders in the system, and finding environmental common ground across coast lines and complex international boundaries. Multidisciplinary approaches are indispensable in studying and conserving the GFBF because stakeholders need to understand how to achieve a sustainable marine ecosystem in the Sea of Okhotsk and Oyashio region without limiting human activity on land. Connecting less dependent stakeholders could be a first step in coping with complicated environmental issues. We attempt to visualize socio-economic relationships inside the GFBF system to demonstrate how stakeholders are related to each other unconsciously. Establishment of the concept will help bring together people who have been separated for many years under political tensions.

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