

Role of ships in our relationship with sea water: An indispensable role in human civilization

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Description

Ships have played an indispensable role in human civilization, serving as the primary means of transportation across oceans and seas for centuries. Their significance extends beyond mere transportation; ships are vital for trade, exploration, and even cultural exchange. This article explores the multifaceted roles of ships related to sea water, their impact on global trade and economies, and the challenges they face in an era of environmental awareness. One of the most critical roles of ships is facilitating global trade. Approximately 90% of the world's goods are transported by sea, highlighting the importance of maritime shipping in the global economy. Container ships, bulk carriers, and tankers traverse vast ocean routes, connecting producers and consumers across continents. The efficiency of maritime transport is unmatched; ships can carry massive quantities of goods over long distances at relatively low costs, making international trade feasible and economically viable. Ports serve as vital hubs where ships dock to load and unload cargo. These bustling centers of activity contribute significantly to local economies, providing jobs and generating revenue. The shipping industry also supports ancillary businesses, such as shipbuilding, repair, and logistics services, creating a vast network that underpins economic stability in many regions. Ships have been at the forefront of exploration, enabling humanity to discover new lands and resources. Historically, explorers like Columbus and Magellan relied on ships to navigate uncharted waters, paving the way for globalization and cultural exchanges. Today, research vessels continue this tradition by exploring the depths of the oceans, studying marine ecosystems, and understanding the impacts of climate change. Marine research plays a crucial role in conservation efforts. Ships equipped with advanced technology, such as remotely operated vehicles (ROVs) and submersibles, allow scientists to study deep-sea environments and monitor the health of marine life. This knowledge is vital for developing strategies to protect vulnerable ecosystems and manage ocean resources sustainably. Despite their many benefits, ships

also pose significant environmental challenges. Maritime transport contributes to air pollution, with emissions from ships affecting coastal air quality. Additionally, the shipping industry is a substantial source of greenhouse gas emissions, contributing to climate change. Another critical issue is marine pollution. Oil spills, ballast water discharge, and plastic waste from ships can have devastating effects on marine ecosystems. Efforts to combat these issues include stricter regulations, such as the International Maritime Organization's (IMO) MARPOL convention, which sets standards for preventing pollution from ships. In response to these environmental challenges, the shipping industry is increasingly adopting sustainable practices. Innovations in ship design and technology aim to reduce emissions and improve fuel efficiency. For instance, the development of hybrid and fully electric vessels is gaining traction, promising a cleaner future for maritime transport. Additionally, the use of alternative fuels, such as liquefied natural gas (LNG) and hydrogen, is being explored to minimize the environmental impact of shipping. Moreover, many companies are implementing "slow steaming," a practice that involves operating ships at lower speeds to reduce fuel consumption and emissions. Protecting our oceans while harnessing the benefits of maritime transport is crucial for future generations.

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Conflict of Interest

The author declares there is no conflict of interest in publishing this article.

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