

1. FREIGHT TRAFFIC VOLUME BY COASTAL SHIPPING
2. INTERREGIONAL FREIGHT FLOW

1. Freight Traffic Volume by Coastal Shipping

The volume of freight transported by coastal shipping in 1970 was 340,000,000 tons or 140,000,000 ton-kilometers. The percentage of freight transported by ship to domestic freight transport accounted for 42% of the ton-kilometerage.

The commodities transported by ship included oil products with 120,000,000 tons, iron and steel with 49,000,000 tons, coal with 26,000,000 tons, gravel, sand and stone with 27,000,000 tons, cement with 25,000,000 tons, and limestone with 23,000,000 tons.

The percentage of freight transported by ship to domestic freight transport in terms of ton-kilometers was about 80% for oil products, about

70% for iron and steel, about 90% for coal, and about 70% for cement.

With respect to these commodities, the mean transport distance was 270 kilometers for oil products, 460 kilometers for iron and steel, 790 kilometers for coal, 147 kilometers for gravel, sand and stone, 460 kilometers for cement, 370 kilometers for limestone, and 280 kilometers for cereals.

Ports with numerous departures and arrivals include Kōbe with 67,000,000 tons, Yokohama, Kawasaki and Nagoya each with 54,000,000 tons.

The coastal shipping as of March 31, 1971, totaled 15,950 vessels, with total tonnage of 4,320,000 tons. In comparison with 1966 figures, there was a decrease of 280 ships and an increase of 2,000,000 tons. With respect to steel carriers, both the number of ships and their total tonnage have increased, whereas for wooden vessels, both the number of ships and the total tonnage have decreased. The ratio of special carriers to general freight transports changed from 43 : 57 to 54 : 46.

Salient Points of the Legend and Map Compilation

The map shows the freight traffic volume by coastal shipping on the basis of the Port and Harbor Survey, and the statistics are derived from the points of departure and arrival of freight and do not reflect those still sailing to their destination. For this reason, the map was compiled on the assumption that the shortest route was used for the movement of freight. For example, it was assumed that freight was transported by way of Tuguru Kaikyō for the trip from Tōkyō to Akita. However, the belt-like illustration for the Seto Naikai represents only the volume of freight leaving and arriving at ports along the coasts of the Seto Naikai. For those neither leaving nor arriving at ports along the coasts of the Seto Naikai, it was assumed that the ships come in from the Pacific Ocean side of Sikoku and go through Kanmon Kaikyō.

Source

1. Ministry of Transport, Port and Harbor Survey, 1970.

these three commodities transported totaled 3,370,000,000 tons (64%).

When Japan is divided into nine regions, the ratio of the intra-regional flow of freight to the interregional flow stands at 90 : 10. When Japan is divided into 22 districts, the ratio is 86 : 14. By tonnage, the interregional flow of freight is 520,000,000 tons when Japan is divided into nine regions. By the method of transport, ships handled 54.9% and automobiles 25.9%. When Japan is divided into 22 districts, the interregional flow is 760,000,000 tons, with ships handling 38.5% and automobiles 45.5%.

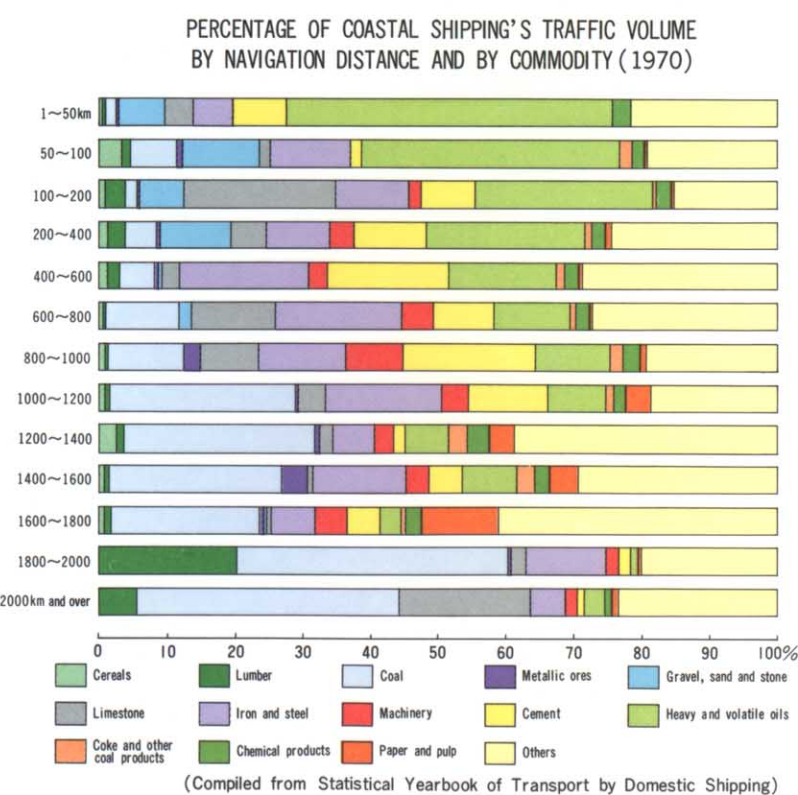
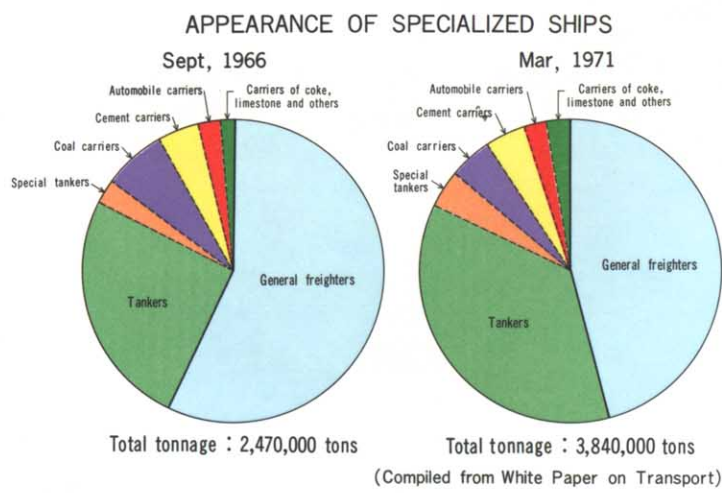
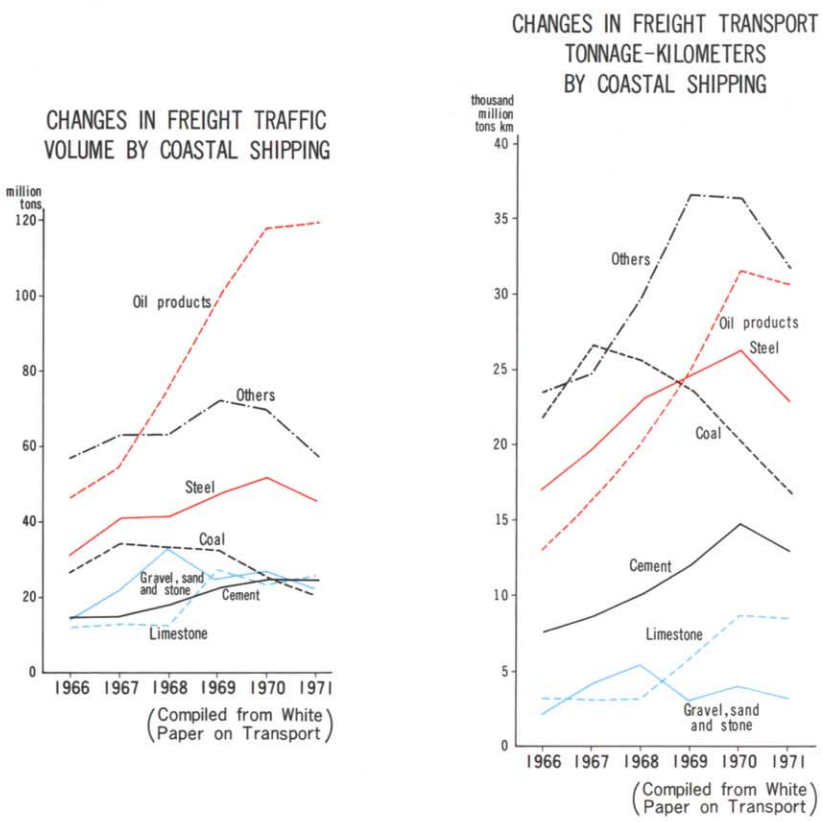
When Japan is divided into nine regions, the percentage of the interregional flow to all flow, as classified by commodity, is 8.3% for farm and marine products, 4.7% for forestry products, 6.4% for mineral products, 14.9% for metal and machinery industry products, 15.3% for chemical industry products, and 9.1% for light industry products. The rate of the interregional flow of freight to the total tonnage of freight, as classified by means of transport, was 40-49% for automobiles in respect to agricultural and marine products, forestry products and light industry products and 60-70% for shipping in respect to mineral products, metal and machinery industry products and chemical industry products. The ratio of light industry products and agricultural and marine products transported by rail is about 39% each.

Salient Points of the Legend and Map Compilation

The radius of the semicircle showing the volume of departures and arrivals in one year is in proportion to the square root of the actual volume of departures and arrivals of each region.

Source

1. Ministry of Transport, Domestic Freight Traffic Origin-Destination Table, 1970.



2. Interregional Freight Flow

The freight flow volume (transport volume) in 1970 was 5,250,000,000 tons. Of this volume, 4,630,000,000 tons (88.2%) were transported by automobile, 420,000,000 (8.1%) by ship, and 200,000,000 tons (3.8%) by rail.

Commodity-wise, the freight transported included mineral products (coal, metallic minerals, gravel, sand, stone, limestone, etc.), special commodities (scrap metal, plant and animal feeds, etc.), and chemical products (cement, oil products, coal products, chemicals, chemical fertilizer, etc.), and the volume of

PERCENTAGE OF DOMESTIC FREIGHT TRAFFIC VOLUME (1970)

