

## Notes

- 1) The similar terms are not used in this research, because their areas are vague.
- 2) The important ports indicate the ports which affect interests of Japan. The special important ports indicate the important ports for the growth of international trade and they are selected from the important ports. There are 112 important ports and 21 special important ports in Japan. The Ishikari port is an important port, but it is excepted from this research, because cargoes are not exported or imported at this port.
- 3) After the completion of the Kushiro flood control canal in 1931, this canal is called the New Kushiro River, the former Kushiro river is called the Old Kushiro River in this research. In the River Law established in 1967 the Kushiro flood control canal is called the Kushiro River and former Kushiro river is called the Old Kushiro River.
- 4) Sir Matsumae was a lord in Hokkaido who divided the seacoast into settlements under the direct control of a lord and settlements under the control of vassals.
- 5) The amount of trade in 1857 was 4,600 koku including 3,500 koku of kelp, 500 koku of herring fertilizer, and 360 koku of salted salmon. 1 koku = 0.28 cubic meter.
- 6) Reference, for example, Norikichi Isoya, *Ezo-Douchuki*. Yoshimaro Fukui, *Ezo-no-Tousui*. Joan Ouchi, *Higashiezo-Yawa*. Takeshiro Matsuura, *Kusuri-Nisshi*.

- 7) Three prefectures indicate Hakodate, Sapporo, Nemuro, and one bureau indicates the Hokkaido Business Bureau in the Ministry of Agriculture and Commerce.
- 8) Shibechea town had been called Kumaushi village till 1928, but to avoid confusion by the village name change, Shibechea town is used in this research.
- 9) The population of Kushiro village was 7,524 in 1894.
- 10) According to the Hokkaido Mainichi Newspaper in December 15, 1887, sulfur was transported from Iozan to Tomondaira by horse, from Tomondaira to Shibechea by 25-koku ship, from Shibechea to Toro by 50-koku ship, from Toro to Kushiro by 100-koku ship.
- 11) The number of passengers was 2,302 in 1888, 2,867 in 1891, 4,590 in 1895.
- 12) After the change of the railway name, four stations were set up and four shuttle trains operated per day. The time required from Shibechea to Iozan was about two hours.
- 13) See New Kushiro City History Vol. 2, 19 , page 951.
- 14) Transportation cost of wood per ton is 2 yen 41 sen from Notsukeushi(Kitami) to Kushiro and 3 yen 41 sen from Notsukeushi to Temiya.
- 15) Agricultural goods 8.8% (22,195 tons), mining goods 1.6% (4,172 tons), livestock goods 0.3% (896 tons).
- 16) 105 thousand passengers, 129 thousand tons of coals and 67 thousand tons of wood were transported in 1925.
- 17) The share of the fishery goods for imports is 15.8% in the Kushiro

port, 44.2% in the Tokachi port, 60.2% in the Nemuro port, 75.1% in the Abashiri port, and 89.8% in the Monbetsu port.

18) The major departure countries were the Soviet Union (95,499 tons), North Borneo (40,213 tons), Philippines (26,985 tons), and Malaysia (22,147 tons).

19) Tokachi district 2.6%, Nemuro district 0.2%, Abashiri district 4.8%

20) Abashiri port 6,333 tons, Monbetsu port 7,513 tons

21) Abashiri port 2,915 tons, Nemuro port 23 tons

22) There were nine beet sugar processing plants in Hokkaido in 1963. Seven plants were located in the eastern part of Hokkaido and accounted for 79.2% of the whole amount of sugar production in Hokkaido. Starch produced in the eastern part of Hokkaido accounted for 44.7% of the whole amount of starch production in Hokkaido in 1963.

23) Kushiro district 55.1%, Tokachi district 15.6%, Nemuro district 8.4%, Abashiri district 20.1%

24) 83.3% of cargo are transported to Kushiro district by truck, 79.2% of cargo are transported to Tokachi district by rail, 71.9% of cargoes are transported to Abashiri district by rail.

25) For instance, in the Abashiri port imports of heavy oil are 4,656 tons and exports of heavy oil are 14,320 tons. 97.5% of the exports are for ships.

26) In the Nemuro port, 66.8% of heavy oil are imported from the Muroran port and 27.4% of heavy oil are imported from the Kushiro port. In the Monbetsu port, 40.2% of heavy oil are imported from the Wakkanai port and 15.3% of heavy oil are imported from the Kushiro

port.

27) Wood chips have been processed in the paper manufacturing company since 1966.

28) Hamakushiro Station which opened in 1961 was cut off from the past freight line in 1967 and connected with the public port line.

29) Container service had already started in Hamakushiro Station in 1965.

30) 9.0% of export cargo and 1.7% of import cargo are transported by rail in Hokkaido.

31) The share of the fishery goods in four ports has decreased, and the function as the commercial port has increased.

32) Livestock goods indicate fresh milk. They are exported to the Hitachi port in Ibaraki prefecture by a fresh milk ship called Hokuren-Mar.

33) Rubbish indicates old paper which is chiefly imported from the Kanto region, then is transported to paper manufacturing plants.

34) Tokachi district 2.3%, Kushiro district 87.8%, Nemuro district 2.7%, Abashiri district 7.0%

35) Hokuren Maru and Daini-Hokuren Maru can transport about 120 trailers and take 20 hours between Kushiro and Hitachi.

36) Tokachi district 18.6%, Kushiro district 56.9%, Nemuro district 8.4%, Abashiri district 15.2%

37) Neither fodder nor fertilizer are distinguished for the restriction of data. Most of the imports are fodder.

38) The ferry had traveled between Tokyo and Kushiro by way of the Tokachi port traveled since Sep. 1997. Ferry service stopped in Sep.1999 because of the decrease of passengers. And RORO ship is plying instead

of ferry.

39) The area of the coal storage yard is 79,255 and its storage ability is 197,000 tons.

40) 1,250 tons of other food and 690 tons of steel are exported from Irifune-cho Quay in 1997 fiscal year.

41) Oil products unloaded in First Wharf account for 64.1% of total imported oil products and heavy oil unloaded in First Wharf accounts for 62.9% of total imported heavy oil.

42) Cargo ship loaded by trailer or forklift.

43) In south quay of Second Wharf, average time of ship at anchor is 37.5 hours.

44) In Tokachi district, competition of wheat hinterland between the Kushiro port and the Tokachi port came to be seen because of the growth of the Tokachi port.

45) Some gasoline are transported from Kushiro Oil Tank to Abashiri district and from Tomakomai Oil Tank to four districts in the east part of Hokkaido.

46) The thermoelectric power plant at the paper manufacturing plant in Kushiro city does not use the coal of Taiheiyo Coal Mine, because of the high price of the domestic coal.

47) Export container cargoes are sugar, livestock goods, and starch. Import container cargoes are fodder, natural fertilizer, and chemical medicine.

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