

Location and its changes of population in the Chubu district in terms of the change of traffic

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I introduction

The research for demographic shift phenomenon covered in many study fields such as population study, sociology, economics, including geography. In these previous researches, residents' own social attribute has been pointed out as a factor which causes a demographic shift. On the other hand, many researches pointed out the change of social conditions. The influences of traffic condition changes affect demographic shift greatly, and the influence reaches from micro demographic shift phenomenon to macroscopic demographic shift. Based on the above viewpoint, the purpose of this research is clarifying about population change of two prefectures in the Chubu District, change of the traffic conditions under railroad construction. In this study, the Meiji era which traffic system of Japan changed remarkably takes as sampled period. The reason for taking up this time is as follows. 1) Corresponding at the time when industrial development of Japan is started at and population begins to flow into a city in connection with it, and 2) physical distributions are corresponding also at the time which shifted railroad traffic from the shipping service since a modern term to the land transport made into the actor.

II Method of this study

In this research, first, we restored the old municipal boundaries of 2 prefectures (Aichi and Gifu) at Meiji 23 (1890) from the National Census municipal boundaries map data 2000 by method of Fujita et. al. (2005). In restoration, we referred to municipal name indicated on the Meiji 24 requisition order list which is recording and selecting the detailed municipal information at the time concerned. The original old municipal code number was given to reference for information of old municipal data, and the shape file (the following old municipal shape file) which dissolve shows the old municipal area of the Meiji era for was created. Using old municipal shape file and digital national information, we analyze and compared the population of municipals which overlaps railroad lines, population change before and after railroad opening of traffic at the Meiji era.

III Results

First, surveying about distribution of population, we can see that population distributed generally not only in plains but also in mountainous and peninsula areas at the Meiji era. In particular, in the Atsumi peninsula, distribution of population is different from present distribution; there were considerable population in the bay area of Atsumi peninsula. The northern part of the Mikawa plateau and Gifu Prefecture shows the same tendency as the present, and the latter is thin, except in the small basin of mountainous area. The influence of opening of railroad is remarkable saw municipals of plain part along Tokaido Line whose opening time was early, and 72% of population growth was observed in about 20 years from 1891 to 1907. Contrary, municipals along Chuo West Line, Iida Line and Meitetsu line, where geographical conditions were bad or opening time were late, had relatively low growth of population, and stopped at 15 to 20% of growth.

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V Reference

Fujita, K., Murayama, Y., Morimoto, T., Yamashita, A., and Watanabe, H. 2005. A Spatial Analysis of Population Change in Tokyo Metropolitan Area from Meiji Era to Today -By Using a Requisition Order List 1891 and DEM Data-. Papers and Proceedings of the GISA 14: 61-66.