

POPULATION LOSS IN NORTHERN JAPAN : THE EXPERIENCE OF HOKKAIDO IN THE 1980s

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INTRODUCTION

Most areas along the northern limits of continuous settlement in the world are experiencing population loss. This is not surprising. The northward movement of the frontier in most cases took place in the 100 years after 1875. The economic attraction was the availability of natural resources—agricultural land, minerals, forests or fish. Primary production has remained the basis of the local economy, supplemented in places by industries such as cheese making or saw milling which process some of the raw materials produced. These kinds of economic activities all experienced continual reductions in the use of labour per unit output in the twenty five years after 1960. Even where output was maintained or increased, the use of machines to replace manual labour caused a fall in the number of people needed. This was particularly obvious in agriculture where farms were amalgamated into larger units and the number of farm families declined. Increasing economies of scale had the same effect in the processing industries. In most of these northern areas the resources available have now been taken up. This means that almost the only way in which further economic development can take place is by a shift in economic structure towards manufacturing and service activities which sell their output outside the local area. Seldom does this happen. There has been a shift to increased service sector employment but this is largely the result of increased provision of government services and the growing affluence and buying power of those still working in the resource based industries. In agricultural areas in particular, it is also the result of buying in many goods and services which formerly would have been produced on the farm. For example purchased tractors and diesel fuel have replaced the breeding horses and the growing of fodder. This kind of service sector growth is still directly dependent upon the wealth generated by the primary industries.

The decline in primary sector employment and the growth of service sector activity has everywhere been accompanied by geographical redistribution of the population. Rural areas and small centres directly supported by the primary industries have lost population, while any population gains have been concentrated in the larger and/or more accessible service centres.

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A good example of these processes at work in the 1980s was provided by Hokkaido, the northernmost of the main islands of Japan. Much of the island was not settled by the Japanese until the twentieth century and remains dominated by primary industries. Although the total population of the island increased between 1980 and 1985 this masked the fact that Hokkaido suffered net outmigration and that over most of the island the population was undergoing decline. This was accompanied by marked geographical changes in population distribution which are examined in this initial paper.

THE ECONOMIC DEVELOPMENT OF HOKKAIDO

Until the 1870s Japanese settlement of Hokkaido was essentially confined to fishing settlements along the coasts in the west and south west, around which a few farms had been established. Following the Meiji Restoration in 1868 the government decided to promote Japanese settlement of the whole island. Before 1900 soldier settlements played an important part in the initial establishment of farming on the Ishikari Plain and along the Ishikari River valley as far as Asahigawa. In the twentieth century the mining of the large coal reserves became important and forest industries developed in the interior especially around Mount Daisetsu. Fishing settlements appeared around the rest of the coasts and in the south east Kushiro became a major fishing and coal mining settlement. Farming spread onto the Tokachi Plain and the Konsen Plateau from the beginning of the twentieth century but even in the 1970s some land was still being cleared around Bekkai at the eastern end of the island. A major iron and steel works was built at Muroran in the south west at the beginning of the twentieth century. In the 1960s the national government began the development of a major heavy industry area around a new port complex at Tomakomai on the south side of the Ishikari lowlands. Meanwhile Sapporo, the capital city of Hokkaido, acquired many service functions and in addition to processing industries it developed manufacturing to supply products to the Hokkaido market. By 1985 it had a population of over 1.5 million and was by far the largest city in Japan north of Tokyo. The location of urban areas with a population of more than 50,000 at the 1985 Census and of the Densely Inhabited Districts at that time is shown on Figure 1.

POPULATION CHANGE 1980–1985.

Between 1980 and 1985 the population of Hokkaido increased by 103,450 or 1.9 per cent from 5,575,989 to 5,679,439. Since births exceeded deaths by 187,712 over this period, there was a net outmigration from the island of over 84,262. Within Hokkaido Figure 2 shows that increases in population were almost entirely confined to the Ishikari lowlands. There the Ishikari sub Prefecture gained 170,475 people, with Sapporo alone experiencing an increase of 141,222 or 10.1 per cent. As the capital of Hokkaido, Sapporo continued to benefit from expansion of government offices and other services serving the whole island. Most of the manufacturing industries here supplied local demand which was stimulated by the growth of these

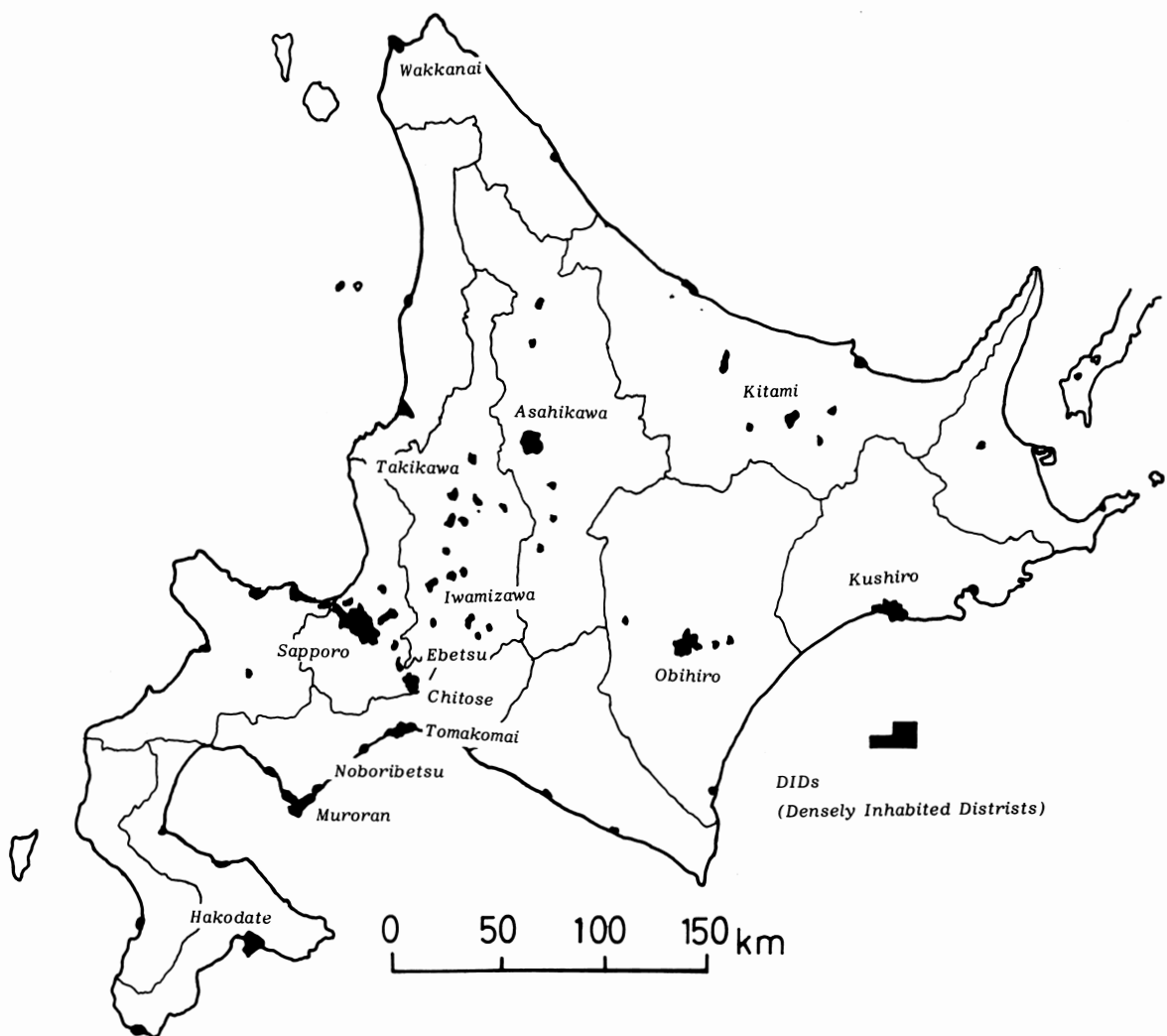


Fig. 1 Distribution of DIDs and Cities with population more than 50,000

services. Further population growth also occurred in the rest of the Ishikari lowlands to the south which lie in Iburi sub Prefecture. There the city of Chitose expanded its population from 66,788 to 73,610. This was mainly the result of the growth in air traffic at nearby Chitose international airport which serves Sapporo. The city of Tomakomai on the coast which was developed as part of the major investment in the nearby port and major heavy industries after 1965, increased in population from 151,967 to 158,061. These increases were more than offset by population losses in the rest of Iburi sub Prefecture which extends into the mountainous areas to the west. There the population of Muroran declined by over 9 per cent from 150,199 to 136,208. This city had grown up at the beginning of the twentieth century around an iron and steel works established to use coal and iron ore mined in Hokkaido. By the early 1980s the works was using mostly imported iron and coal and investment to increase producti-

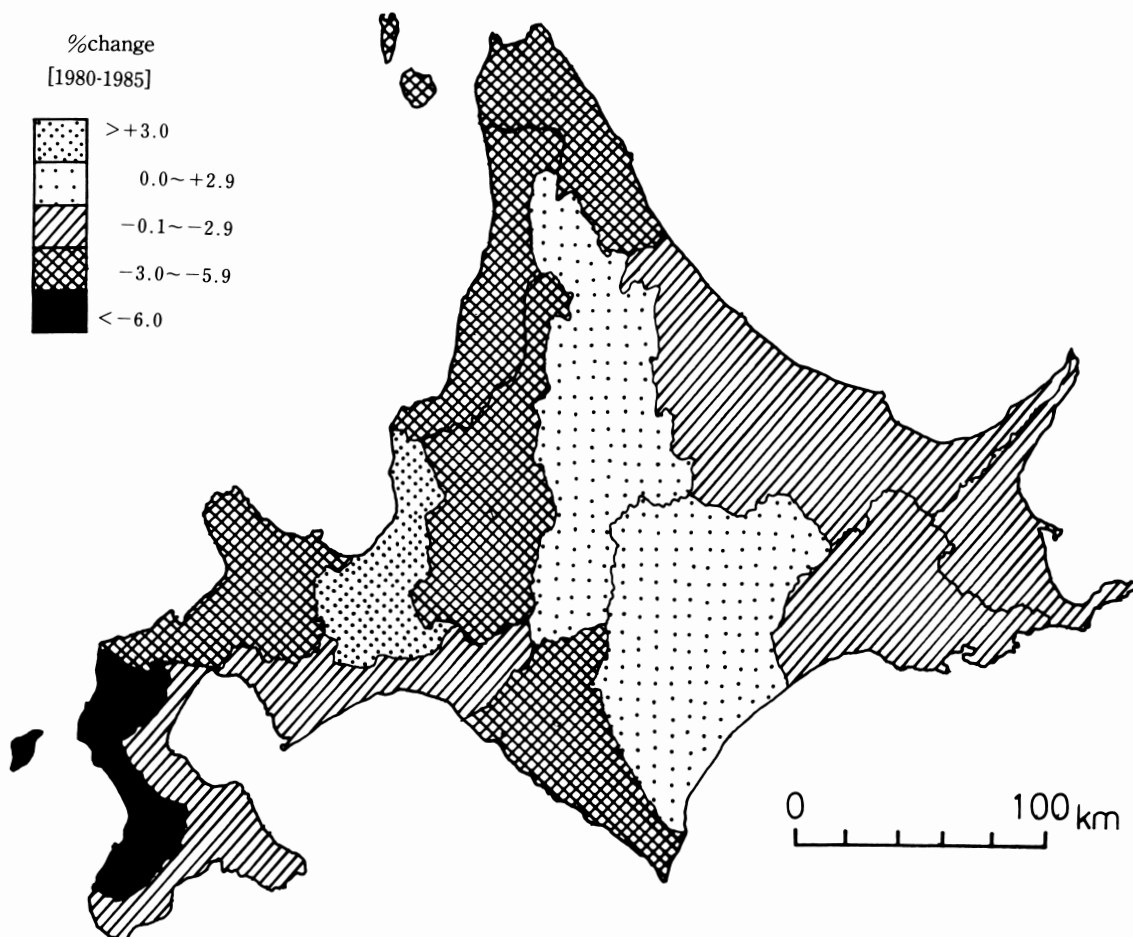


Fig. 2 Population Change in Hokkaido, 1980-85 by Sub Prefecture

vity had reduced the size of the labour force. In 1987 iron and steel making at the works mostly ceased with a large loss of jobs.

In the rest of the mountainous peninsula west of the Ishikari lowland, all three sub Prefectures of Shiribeshi, Oshima and Hiyama suffered population loss. It was in these areas that the first fishing settlements in Hokkaido had been established. Here too are located the cities of Hakodate and Otaru which are major ferry ports and transhipment points for materials sent south from Hokkaido and for goods brought north from mainland Japan. Both have suffered from the decline in the fishing industry and from changes in the transportation system. Tomakomai with its modern port facilities has captured a lot of the ferry and transhipment traffic. At the same time the rapid expansion of air travel since 1960 has meant that Chitose airport now handles much of the passenger traffic that formerly would have gone via the ports. A further blow for the transport functions of all these cities was the completion of the Seikan rail tunnel linking Hokkaido to northern Honshu in 1988, the effects

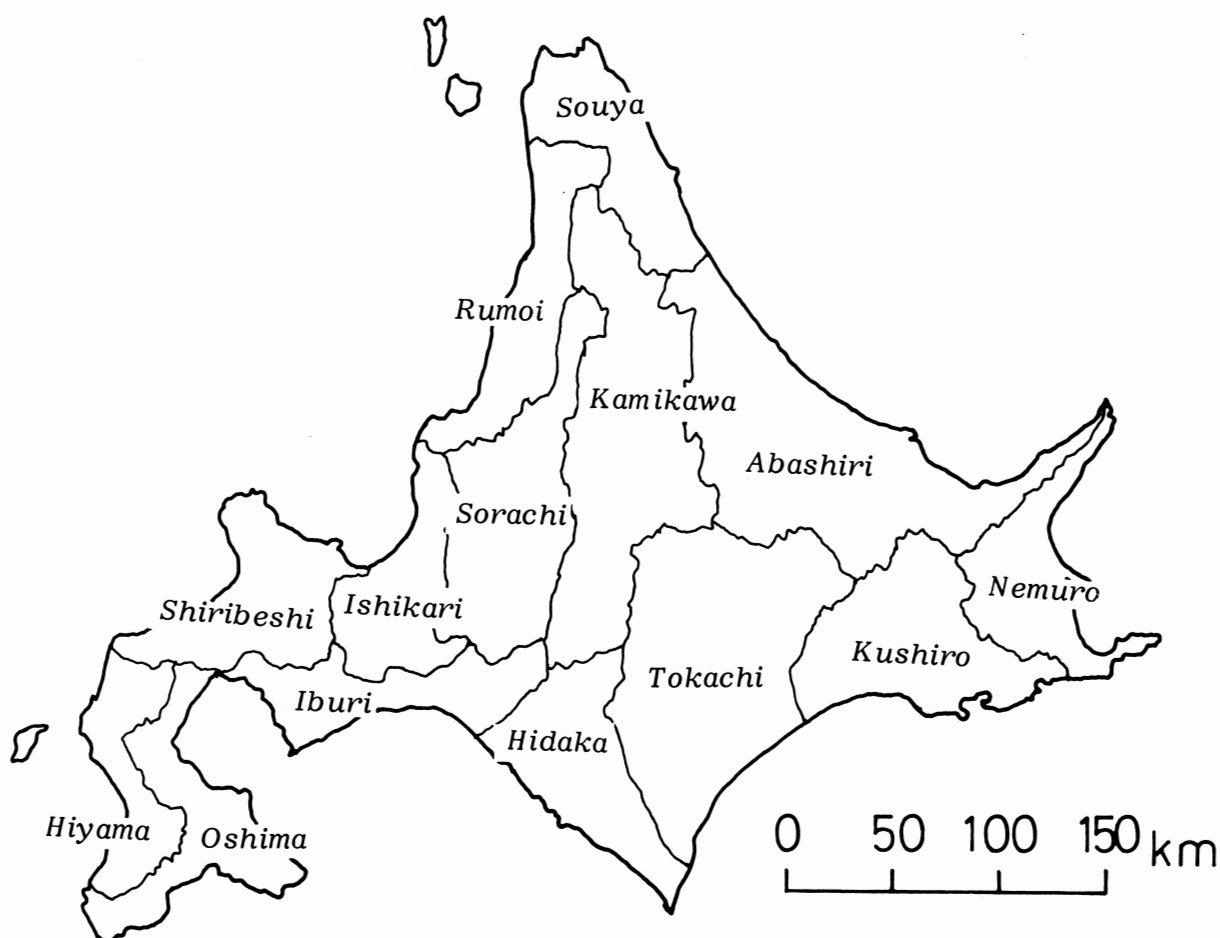


Fig. 3 Location of Sub Prefecture

of which can be expected to be shown in the results of the 1990 census.

Most of Hokkaido lies to the east of the Ishikari lowlands. Of the nine sub Prefectures covering this area only two gained population between 1980 and 1985. In both cases the population increases were much less than the excess of births over deaths, indicating net emigration. The largest population loss from any sub Prefecture in Hokkaido occurred in Sorachi. The total population fell by 23,014 or 5 per cent from 488,630 to 465,616. In the north west of this sub Prefecture the valley of the Ishikari extends the lowlands into the mountains, but in its upper section the valley cuts across the coalfield which runs north south. The town of Imamizawa which is nearest the Ishikari Plain, actually gained population. It benefited from being on the main transportation corridor between Sapporo and Asahigawa, which is the second largest city on the island and from development of local manufacturing industry as a satellite of Sapporo. Most of the areas which lost population were affected by continuing decline of coal mining. The populations of both Akabira and Ashibetsu

fell by around 10 per cent in the first half of the 1980s, but the largest absolute and relative decline occurred in Yubari. There the population fell by 10,050 or nearly 25 per cent from 41,715 to 31,665. Yubari city is a coal mining town located in a deep narrow valley in the mountains. The coal mines on which the settlements of this area depended have all closed. The development of tourist attractions provided some replacement employment but not enough to halt the massive out-migration that has occurred.

Sorachi in which Yubari is located is one of only two sub Prefectures in Hokkaido which does not extend to the coast. The other is Kamikawa which covers a large part of the western slopes of the main mountain chains in the centre of the island. The population here remained virtually unchanged between 1980 and 1985, rising slightly from 582,489 to 582,929. All the increases took place in Asahigawa the second largest city in Hokkaido which occupies a major basin within the mountains crossed by the Ishikari River. Favourable summer climate here led to early agricultural settlement. Recent growth resulting from its location at a focal point in the transportation system of Hokkaido and the addition of further distribution functions and government services caused the population to grow from 352,619 in 1980 to 363,631 in 1985. All the other districts in Kamikawa where primary industries remained dominant, experienced population loss.

The three sub Prefectures around the northern coasts of Hokkaido all declined in population. The number of people in Rumoi and Soya fell by 5 per cent in each case. Both are dominated by agriculture and fishing and are relatively remote from the larger cities so that little alternative economic activity has developed. The population of Abashiri sub Prefecture which borders the Sea of Okhotsk, declined by only 1 per cent. This was because an increase of 4,366 in the population of Kitami partly offset major declines in the city of Abashiri and elsewhere in the sub Prefecture. Abashiri city in particular was affected by difficulties in the fishing industry. Kitami by contrast is the largest service centre in the north east of the island with over 100,000 people. It grew as a result of expansion of service activities and especially the location there of branch offices of government departments.

The two sub Prefectures in the south east of the island both lost population. Nemuro, the easternmost city in Hokkaido, is located on a peninsula. Before the development of modern land transport it provided ready access by sea for settlers moving onto the Konsen Plateau and was an administrative centre of the area for this reason. In the 1980s it suffered from its remoteness by land transport from the rest of the island and from the decline of the fishing industry. To the west the population of Kushiro sub Prefecture remained almost unchanged, falling from 307,195 to 306,767. With births exceeding deaths over this period here too there was outmigration. Kushiro remains one of the most successful fishing centres in Japan but even so it has suffered from recent exclusion of Japanese fishing fleets from some fishing grounds

and from competition from fish imported from other countries. As the largest city in the western half of Hokkaido, it has benefited however, from the expansion of the service sector. Most of the population growth this caused, spread east beyond the city boundaries into the neighbouring area of Kushiro-Cho. There the population grew from 13,123 to 15,942 but this was not enough to offset declines in the rural hinterland of Kushiro where the numbers engaged in agriculture in particular continued to fall.

Tokachi sub Prefecture west of Kushiro includes all the extensive agricultural area of the Tokachi Plain. It is surrounded on three sides by mountains with the sea to the south. Here population in almost all the rural areas declined. This was more than offset by the growth in the city of Obihiro in the centre of the plain and the major focal point of a large hinterland. With increases in services including government offices and growth of milk processing, the city expanded from 153,861 to 162,932 a growth of almost 6 per cent.

The last sub Prefecture is Hidaka lying between the Hidaka Sanmyaku mountains and the sea to the south east in the south of the island. Fishing villages were established here very early but there is limited agricultural potential. Shizunai the largest settlement had only 26,045 people in 1985 and was not big enough to develop major service functions. Every sub district in this sub Prefecture lost population between 1980 and 1985. The greatest losses occurred in the mountainous area around Hidaka in the north where the population fell by nearly 14 per cent.

CONCLUSIONS.

From the previous account it can be seen that almost all those areas of Hokkaido which have remained rural and/or dependent upon primary industries, suffered population declines between 1980 and 1985. The highest rates of decrease occurred where coal mines were closed. Settlements based on the fishing industry experienced declines, mainly because of limitations on fishing by Japanese fleets within the territorial waters of other countries. The increasing value of the Yen added to these difficulties by reducing the price of imported fish. Capital investment in the fishing industry has contributed to the trend by reducing the demand for labour in the ports and in the fish processing plants. In agriculture there has been an increasing emphasis on dairy farming to meet the growing demand for dairy products in the Japanese domestic market. Here the increased income has been used to increase investment especially in mechanisation. This has reduced the demand for labour and increased the amount of land and the size of dairy herd that one farmer can manage.

The population increases which were recorded almost all took place in larger settlements with wide hinterlands. All these benefited from the increasing proportion of employment in services, with growth of government employment often being particularly important. Sapporo as the centre of the Prefectural Government of

Hokkaido and with many branch offices of the national government, gained most of this kind of employment. It also has the head offices of many private sector services serving the whole of Hokkaido and is the main wholesaling and distribution centre. By 1985 over 27 per cent of the Hokkaido population was living in the city. If the adjacent urban areas of the lowlands are added, including Chitose and Tomakomai to the south and Otaru, the outport of Sapporo to the west, then over 38 per cent of the Hokkaido population is clustered in this area. The only other major settlements on the island which grew were Asahigawa, Obihiro and Kitami. All three are service centres of over 100,000 people, with large hinterlands dominated by primary industries where the population declined.

The decline of population over so much of Hokkaido raises a whole range of practical issues about the future human geography of the island. Already the spatial distribution of public services is undergoing change. For example a fall in the number of schoolchildren in rural areas is causing school closures and government offices are being moved from declining centres to places which are more central and growing. With services financed by government so important for many local economies such changes of themselves contribute to population redistribution. There is a clear need for projecting population trends into the future to identify what is likely to happen. Plans can then be made either to deal with the consequences of such anticipated changes or to take action to achieve a different geographical result if that is considered desirable. What is clear is that for the foreseeable future the numbers employed in the primary industries and associated initial processing, can be expected to continue to fall. Any employment growth will be associated with expansion of other kinds of manufacturing and services. The location of services will play a particularly important part both because there are now more people employed in services and because they can be expected to continue to grow as a proportion of total employment. Here the government has a particularly important role to play. Government service employment contributes an important economic input in many local economies in Hokkaido. It follows that any changes in the location and spatial distribution of such services will be a major influence in what happens next to the distribution of population in this northern part of Japan. The national government played a major part in the spread of Japanese settlement across Hokkaido in the past. Through its major role as the provider of so much service employment in particular, its decisions will continue to be a dominant influence in what will happen to the distribution of the population of the island in the future.

北日本における人口の減少

—— 1980 年代における北海道の事例 ——

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資源依存地域として成立した北海道では第一次産業の衰退とサービス業の拡大が人口の再配置をもたらしている。

また 1980 年と 85 年の間の全道の人口増加にもかかわらず、転出超過と大部分の地域における人口減少がみられる。すなわち、人口の増減では道央地域とその他の地域との間にきわだった相違があるほか、道央地域内でも一部の例外を除き、都市部での増加と農村部での減少という相違がみられる。

最近 5 年間（1980－85）で最も人口の減少をみた地域は産炭地と第一次産業地域で、一方増加をみたのは広い後背地をもつ札幌をはじめとする旭川、帯広、北見などである。

このような人口の減少は北海道の将来に広範な問題をひきおこすことになろう。サービス業が雇用の中心となっている現在では、政府の財政援助により維持されている公共サービスの空間的分布や立地が重要な意味をもっている。この点では中央政府はこれまでと同様に将来においても北海道の人口配置に重要な影響力を持つことになるであろう。

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