Migrating back to history? The settlement structure and migration in Finland, a 400 years' perspective

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Abstract. Economic historians have shown maps from early history describing settlement structures and boundaries of permanent settlement of Finland. Population has moved towards the north and east and settled the whole country in the long time period up to the early 20th century. Since the Second World War, the Finnish society has undergone vast structural changes and the role of migration has occupied an important position in shaping the regional settlement structure. Nowadays the population settlement concentrates to the coast, river valleys and the nodal centres of foreign trade. These areas are the same as in the early settlement phase.

The history of population distribution of Finland is one of the longest in the whole world. The first information based on statistical data about Finnish population and its distribution can be found from the Swedish population statistics of the mid 1700s (see Jokipii 1992: 8). Economic historians have shown some earlier maps describing the settlements structures and boundaries of permanent settlement of Finland (e.g. Jutikkala & Pirinen 1989: 49). Later population has moved towards the north and east and settled the whole of the country. Afterwards, there have been trends of both dispersion and accumulation of population. The accumulation and concentration movements have gradually lead to the situation that the current population settlement map has started to remind the historical settlement map of Finland of early 1600s.

This movement towards the spatial pattern of the 1600s is an interesting phenomenon, because the image and policies are assuming a "complete" settling of Finland. It is in this context that the discussion of population movements in Finland has increased in recent years. The migration from the countryside seemed to slow down during the end of the 1970s and early 1980s. The economic recovery and "boom" that started in the middle of the 1980s and continued until the end of the 1980s showed again that a better economic situation seems to create new migration waves. The economic depression that hit Finland during the early years of the 1990s and especially in the years 1991-1992 almost "halted" migration from the countryside to the more central areas. After the depression the migration has accelerated again during the second half of the 1990s.

The economic recovery, although with high unemployment, that started in Finland around the middle of the 1990s has meant a change in the population development and movement patterns. The headlines of local

newspapers have returned to the tone which they had during the time of the "great move" of the late 1960s and early 1970s. There seems to be a fear that the whole of the countryside is gradually emptying. The spatial pattern of population distribution is moving towards a clear concentration into the main centres.

This article discusses the population and settlement development patterns of Finland and uses information and maps from a period of 400 years. The reason for this kind of retrospective approach is the realization that population concentration currently occurring in Finland seems to go back to history. This means that the most populated areas are the same as those about 400 years ago.

The early permanent settlement as a historical perspective

In Finland were forests and mires have always created the most part of the country's surface and thus created obstacles for settlement waterways have had a great importance to the pattern of settlement. This can be seen from the figure 1, which shows the permanent settlement pattern of Finland in the late Middle Ages, the period that lasted in Finland until the late 1500s.

The population pattern that can be seen from the map in figure 1 shows clearly that the permanent population favoured western and southern coast lines of Finland, but also the river valleys along the coast of the Gulf of Bothnia had permanent population all the way up to Tornio. Permanent settlement had also spread from the coast to the inland of southern and south-eastern Finland along the lake shores. The reason for starting to settle the uninhabited

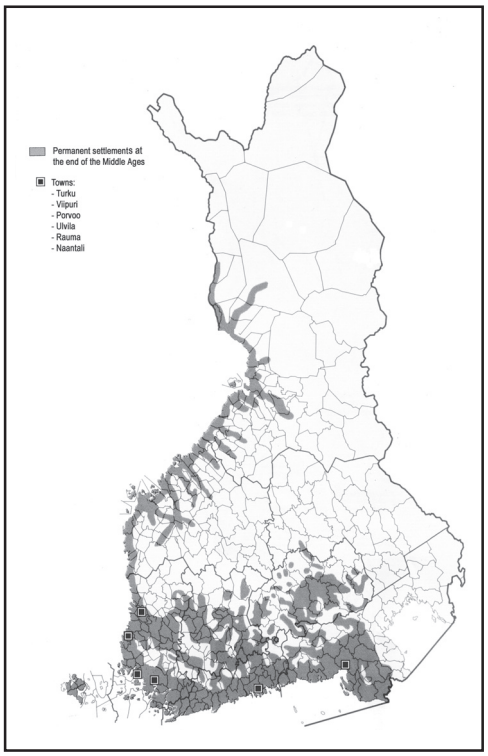

Figure 1. Permanent settlement and towns in Finland in the Middle Ages. (Source: Jokipii 1992).

'wildernesses' of Finland, was the desire of the Swedish King Gustaf Vasa who wanted to enlarge his kingdom. In April 20, 1542 he published an open letter in which he declared all uninhabited wild forests, i.e., wildernesses, both in Finland and Sweden to be the property of God, King and the Crown, forever after (Juva 1950: 233-234). This declaration made it possible for the king to grant special privileges to those who were willing to move to these "new areas of crown". The usual incentive for moving was a tax-exemption, e.g. for 50 years.

The population of Finland had grown during the 1700s and 1800s clearly faster than in other Nordic countries. This growth

was the fastest in the world during the 1700s, 1.2 % per year, which was a double speed compared to Sweden. There are surely many reasons for this kind of population increase: high birth rate, higher propensities to marriages and to build up a family. The lower death rate of Finland compared to other countries can be explained at least locally that the population was not concentrated to such a high degree to population centres, which were more common in else where and had a higher propensity to epidemics (Tarkka et al. 1991: 25).

The population development and the settlement of Finland after the Middle Ages has grown substantially. The areas that were already permanently inhabited during the earlier period have increased their population, but the edge of the settlement has reached further to the North and East. Looking for the spatial depth of the population in Finland the eastern parts have now been settled, but in the most northern part of Finland and in the more central part the area, nowadays called Suomenselkä, were almost totally uninhabited. The number of cities during this time was eight compared to six during the Middle Ages. The only city having at least 2 000 inhabitants was the city of Turku, which at the time was also the capital of Finland (fig. 2).

The settlement structure of Finland has changed substantially from the mid 1700s to 1865 (fig. 3). The concentration of population into the cities has increased remarkably which comes evident from the growth in the number of cities. The total number of cities was 33 and two of the principal cities of Finland, Helsinki and Turku, had at least 10 000 inhabitants. The rest of the cities divided almost equally to two groups. 14 cities had at least 2 000 and less than 10 000 inhabitants and the rest of the cities (17) had under 2 000 inhabitants.

The rural population settlement has also increased substantially, but the main population pattern of coastal and southern direction has still remained. The interesting point is that the population in the most fertile agricultural landscapes has increased and the areas around the cities seem to have gained more population than other parts of Finland. It should, however, be noticed that rural population has been moving towards the north, but still the most northern part of Finland remains almost completely uninhabited.

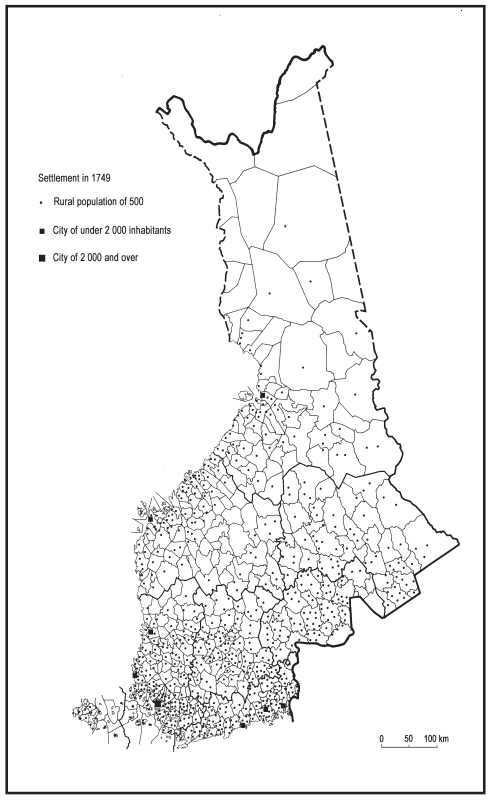

Figure 2. Settlement of Finland in 1749 (Source: Jokipii 1992).

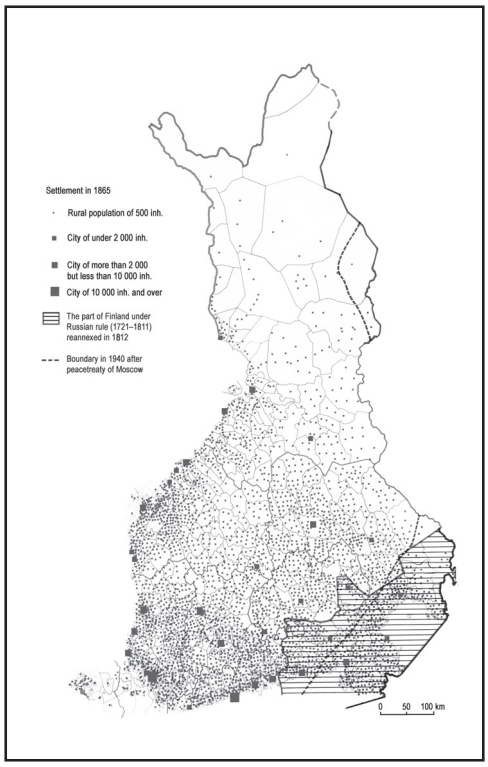

Figure 3. Settlement of Finland in 1865. (Source: Jokipii 1992).

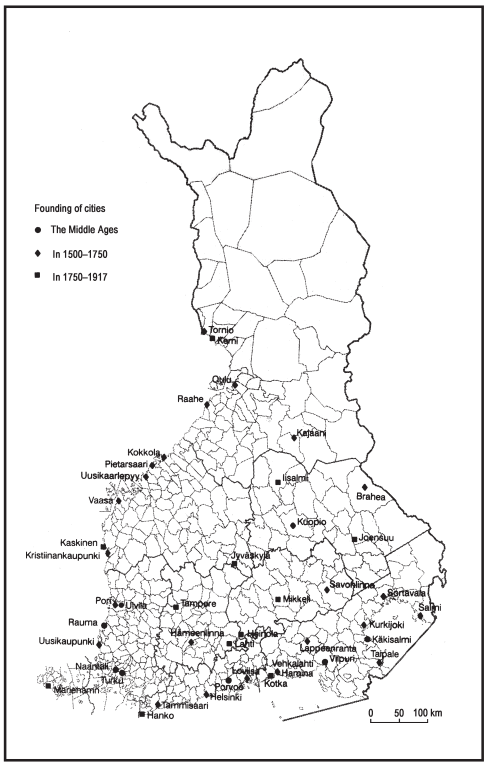

Figure 4. The founding of cities in Finland up to 1917 (Source: Rikkinen 1992a).

The impact of modernisation to the settlement structure and migration pattern

The economic development in Finland can be seen from the structure how cities have been created in the Finnish territory (fig. 4). The oldest cities from the Middle Ages to the early 1600s are all coastal harbour towns. The reason for their existence is the trade that was concentrated on the coast. Later the inland areas and especially those waterways that were used for transportation needed trading posts and consequently in the later part of 1600s new cities were established in the inner part of Finland. It is, however, important to notice that the area of Suomenselkä and northern Finland, i.e. Lapland, did not have any major population concentration.

The population of Helsinki, (capital from the year 1812 onwards), was 65 000 inhabitants in the beginning of 1890s, but only three decades later it was already 161 000. The population of Tampere (founded in 1779) grew between 1880-1900 nearly three fold and the populations of Turku and Viipuri more than doubled. Migration directed also to other cities and settlement centres of Finland, but in a smaller scale. The greatest population pressure of the

rural areas came to the cities from the central-eastern Finland, and proportion of migrants of the whole population of these areas rose up to 7-8 per cent. The influence of the growth of the population centres was, however, temporary. The population engaged in primary industries decreased 10 % during 1870-1900, but the during the first decade of 1900 the increased population growth changed the situation back to the one before the change. The proportion of the primary sector was again 80 % like earlier (Tarkka et al. 1992: 23, 25-26).

The Finnish geographer J. G. Granö published in 1936 in the Geographical Handbook of Finland a complete analysis of the settlement in Finland. The possibility for this work was the relative stability of the society. One of the figures of Granö shown as figure 5 describes population centres and uninhabited areas of Finland in the middle of the 1930s. In 1930 there were 38 cities in Finland, which had only about 30 % of the population of the country. The total population of Finland was at that time approximately 3.5 million. According to Granö there were 25 market towns, 35 densely populated communities and 35 other settlement centres (see Rikkinen 1993: 37). This figure 5 shows quite clear resemblance to the map of settlement and population of 1865 (fig. 3). Lapland and the area of Suomenselkä have still remained almost completely uninhabited, showing that the difficult transportation and poor land conditions have stayed as the barrier for settlement.

The Second World War had a profound impact on Finnish population and settlement structures. Finland had to give large regions to Soviet Union as a result of the peace treaties made after the war. The total area, which was lost consisted about 12 % of the surface of the whole country. From these lost areas moved voluntarily to Finland nearly 425 000 persons, i.e. over 12 % of that time population in the country (fig. 6). About 55 % of the immigrants were involved in agriculture and 17 % in industry. Thus, it was natural that the settlement actions were directed towards countryside. Industrialisation was just starting and the cities could not take the immigrants as a whole. In 1940 only 27 % of population were living in the cities and market towns in Finland. The most new farms were established to southern and south-western Finland. So called "cold farms" were es-

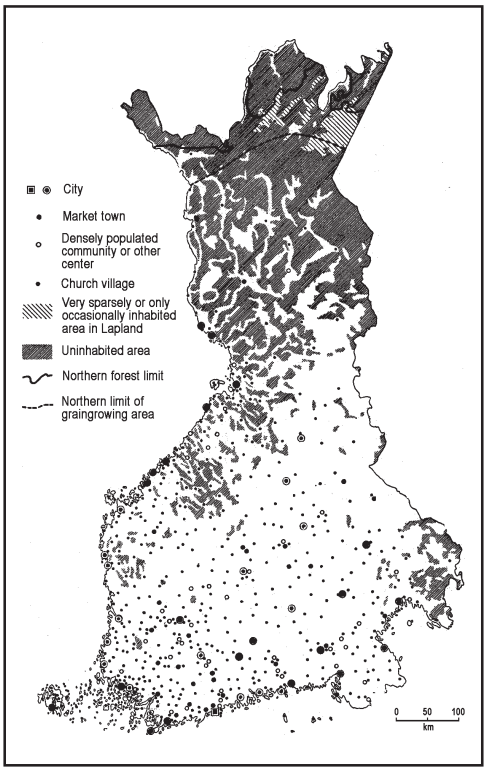

Figure 5. Population and uninhabited area of Finland in the middle of the 1930s. (Source: Granö 1936: 19).

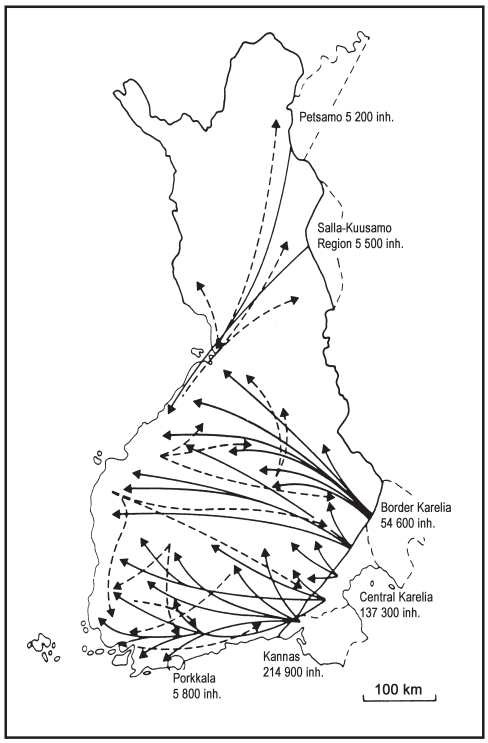

Figure 6. The settlement of the immigrants until the beginning of 1945 and the directions of the immigration flows 1945-49. (Source: Rikkinen 1993: 39).

tablished to uninhabited areas. In northern Finland over the half of the new farms were of this type and in Lapland all new farms were established to uninhabited areas. During the years 1941 and 1959 the total arable land grew about 350 000 hectares. The greatest relative growth of the arable land was in the province of Lapland, where the arable land area nearly three folded. New field areas were cleared also in the provinces of Oulu, Kuopio and Northern Karelia. After the wars the weight of the fields moved northwards which meant from the view point of agriculture moving in average to weaker natural conditions (Rikkinen 1993: 39-40).

When going to the 1960s the pace of industrialisation and urbanization started to accelerate in Finland. The result of this was so called moving out from the countryside. Population loss was the greatest in the marginal rural areas. Population moved to cities and other population centres and this process has touched strongly after the war established new settlement areas and many of them has nearly abandoned. So, the wave of settlement which after the Second World War moved northwards and towards the fringe areas of the municipalities has withdrawn back (Rikkinen 1993: 41-42).

The population concentration areas of Finland in 1960 can be seen from the figure 7. The capital region of Helsinki has had the most of population and the settlement weight of Finland was to south and south-western parts of the country. In the central and especially northern parts of Finland there were only small, in population amount, built-up areas. The built-up areas are the population concentration areas, which have in minimum of 200 inhabitants and the distance between dwellings is at maximum 200 metres. In 1960 56 % of the population was living in the built-up areas. People engaged to agriculture and forestry consisted about 36 % of the economically active population. The same figure in 1950 was 46 % compared to 22 % in Sweden (Rikkinen 1993: 42).

The urbanization process has continued and in 1970 64 % of the population of the country was living in the built-up areas. The same figure in 1980 was already 72 % and in 1985 nearly 78 %. The proportion of the economically active population, which was engaged to agriculture and forestry was 20 % in 1970 and the proportion of the peo-

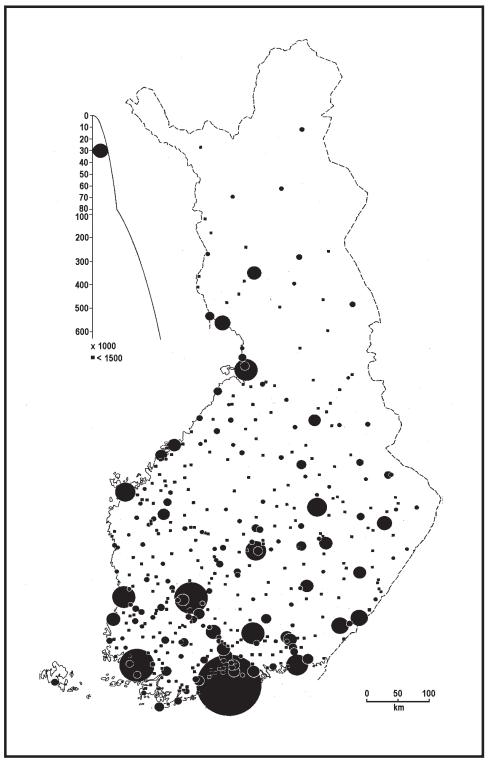

Figure 7. The population of built-up areas in Finland in 1960. Built-up areas have been done by combining the statistical built-up areas into the whole units. (Source: Rikkinen 1977).

ple engaged to industry and services grew (Rikkinen 1993: 42). Migration between municipalities was greatest in Finland in the turn of the decade from the 1960s to the 1970s: the maximum value was in 1974, when the total number of migrants was 276 000 persons. This period is known as 'great migration', for which it was typical to move from rural areas to cities. Behind this phenomenon was the fast change in Finnish society from a agricultural society to an industrialised one.

At the end of the 1970s the economic recession in Finland slowed down migration flows. Until the middle of the 1980s a regional balance in the migration flows was reached. It was also a period when the regional policy instruments started to have an effect. One example of the change towards economic and regional development was the interest that was placed on rural regions and their viability. One main trend at that time in Finland was the use of special 'village plans' as tools for revitalising the countryside and the villages in general (Jussila & Malinen 1993).

In Finland the public sector has had also a big influence on regional balances. The public sector was creating the service production, such as health care and social services. The political programmes stipulated that most public services should be provided at reasonably similar standards in all regions and municipalities. Finally, in some regions this led to a strong presence of the public sector, providing up to 45 % of the jobs in some labour markets (Johansson et al. 1997: 5).

This policy approach led also to a development of labour market areas, which increased in size. These areas covered in the middle of the 1980s almost completely the south and south-western Finland (fig. 8). For instance, between Helsinki and Tampere there is a chain of larger and smaller-sized build-up areas. In western and coastal areas the labour market areas are only half-circles in size, but nevertheless, it is possible to identify similar type of chains of built-up areas as in southern Finland. In the eastern Finland, however, most labour market areas are "isolated islands", which do not have immediate connection to a neighbouring labour market areas, with the exception of for instance labour market areas around the cities of Kuopio, Jyväskylä, Joensuu and Lappeenranta.

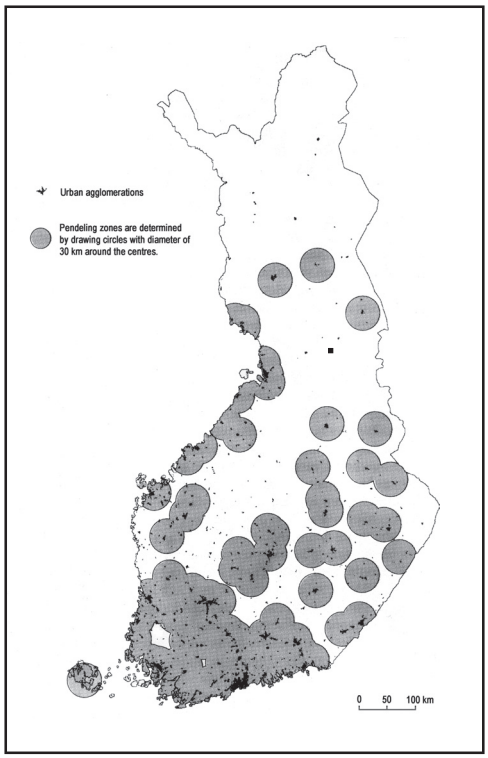

Figure 8. Build-up areas and pendeling zones of 10 000 or more inhabitants in 1985. (Source: Rikkinen 1992b).

After the middle of the 1980s there started to be signs of growing migration flows. The moving was so high in numbers that people begun to call this period "as a new migration wave". Migration directed again from the north to the south and from the rural areas to the main centres of the regions.During this period the most part of the new working places were created to southern Finland which effected to the direction and volume of migration (Karjalainen 1989).

It has been noticed that in the end of the 1980s geographical mobility has been higher, in relative terms, among unemployed persons compared to employed persons: migration rates of unemployed were three times higher than among employed. Unemployed persons with higher education moved three times more often than unemployed with lower education, and twice as often as unemployed with intermediate education. In Finland the unemployed has got a high match in employment during the boom in 1988-89, when the total match included two-thirds of the unemployed migrants. The highest match in employment was reached by higher educated unemployed persons: over 80 % of them were employed the year after moving. This shows that people who have educated themselves to a higher level and have been unemployed in their own regions are more ready to move away to better labour markets, and the results show also that the moving has been successful. During the period with favourable development in the labour market in the end of the 1980s, the total figures among the employed show that they had 83 % tendency to keep their status as employed after migration. Higher educational level increased the chance to keep the status as employed after migration. These results indicate that among higher educated employed there is a motivation for moving in order to get a better position in the labour market or utilise better own human capital (Johansson 1997: 12-18).

Development trends in the 1990s

In the turn of the 1980s and 1990s the migration volume slowed down because of the depression of the economy. This meant that the unemployment rate of Finland was in the new and huge number. It has been observed that the regional structure of

unemployment altered in the recession years, in that the highest unemployment figures were recorded not only in the peripheral areas, which had typically been the most difficult areas in this respect, but also in the surroundings and suburbs of the major cities (Muilu et al. 1996).

The change in the unemployment level in Finland effected to the migration propensity, since both the possibility to get a job after moving and the belief that moving might help to get a job decreased. In Finland the highest geographical mobility has thus occurred during the boom both for unemployed and employed. The employment fell remarkable for unemployed migrants during the depression in the early 1990s, when total match in employment was only 40 % after moving. The labour status change in the depression period for employed proved dramatic changes in Finland. Totally only two-thirds of the employed who have migrated kept their status as employed after moving. In the educational groups there was same situation as during the boom: the employed with higher education have had the highest match in employment after migration. The results for lower educated migrants during the depression showed that nearly half of them have lost their status as employed after migration (Johansson et al. 1997: 13-19).

Migration between the municipalities was lowest during the economic depression in 1992: there were only 169 270 migrants. During the very recent years the migration numbers have started to grow again and it has been said that migration reminds nowadays the "great migration" twenty years ago. In 1994 there were already 218 000 migrants between the inter-municipality migration and until 1999 their amount was even 259 000 (see Kauppinen et al. 1997; Nieminen 2001: 38).

When analysing migration and settlement patterns in very micro level from the GIS-database of Statistics Finland on migration and employment it can be noticed that in Finland in 1994 there were about 105 000 settled one times one kilometre grid squares of which around 40 000 had migration phenonmenon. This database shows that negative migration balance has not only been the problem of the sparsely settled region, but it can be noticed also in the most densely populated areas. According to the GIS-data one third of the inhabited area of the ten largest cities in Finland had a negative migration balance. This means that the settlement structure within the cities is concentrated even more clearly than in elsewhere. Although, in the direction of migration can be seen the seach from the rural areas to the cities, in absolute terms the greatest migration flows are between the cities and within them. Essentially this is the result of it that over 80 % of the total population of Finland is living in the built-up areas (see Kauppinen 2000).

From the second half of the 1990s to the turn of the millennium the moderately large central regions of know-how and adminstration have received migration gain while the principal migration flow has directed to the southern parts of the country. In the northern part of Finland the city of Oulu on the coast has been the only growth centre there. A new characteristic is that several of the small town areas have plunged into a vicious circle of migration loss. Net migration loss particularly includes industrial cities characterised by a one-sided production structure, but also many of the provincial centres (Laakso 1998: 13-14, 68). According to Vartiainen (1997) a new characteristic is expressly the proportional

regression of service-oriented middle-sized centres and the weakening of their competitive status compared to the growth centres. Whereas in the 1970s people escaped from the countryside, now there is also a threat of desolation of the cities. For example in 1996 there were only nine sub-regional unit (of the total 85 sub-regions) experiencing migration gain. The structure of migration follows a pattern of educated people flowing from e.g. Kuopio, Joensuu, and Rovaniemi to Helsinki, Turku, Tampere, Jyväskylä and Oulu.

The concentration of population and economical growth in Finland in the end of the past millenium has been interpreted as the result of globalisation and advantages of concentration. In practice concentration has been seen as essential in order for us to succeed in the global market and European Union with the help of sufficiently large production and service centres. Migration has increased differences of income between provinces. Net migration is directed to even fewer regions than before, has an ever increasing influence on the population in areas of migration loss and is strongly concentrated on the active population (Kangasharju et al. 1999; Korhonen 1994). Migration guides young people by its selectivity to the growth centres, which results to ever decreasing birth rates in the outlying districts (Karjalainen 1993; Okko et al. 2000: 9-11). The reverse sides of concentration are depopulation and the costs of structural change.

Future - are we going back to history?

The land area where a half of the population of Finland is living has diminished in the long run. Hustich (1972) has calculated the concentration of population since 1880 to 1970 (fig. 9). The connection of the Finnish economy to the world market has sthrengthened the historical nuclear area of the population. Nowadays (see fig. 9) the population settlement concentrates to the coast, river valleys and the nodal centres of the foreign trade. The coastal municipalities adjacent to the large cities have sustained or even increased their population by becoming part of bigger labour markets (see Westerholm 1999: 91).

The urbanization rate of Finland is behind the share of Sweden; 63 % of Finnish population was living in the cities in 1995 and the corresponding for Sweden was 83 % (Seppänen 1996: 55). If Finland will reach the same level of urbanization as the neighbouring country, Sweden, the population distribution will remind even more the historical population distribution. According to Vartiainen (1995: 57) the prognosis for small town regions in urban development is not promising because the future development is assumed to favour large cities. The smaller built-up areas are assumed to develop primarily as satellites of the larger ones or as parts of their growth zones. The dismantling of the welfare state has meant growing difficulties in many administrative centres of rural areas, which have traditionally expanded largely on the strength of the welfare services (Andersson 1993: 42). Urban development will in the future consist more and more of the use of existing built-up areas.

The Ministry of the Interior matters endeavours to equalise the strengthening migration by establishing a national growth centre network of 30-40 regional centres to promote the interaction between the countryside and the cities (Salmela 2001).

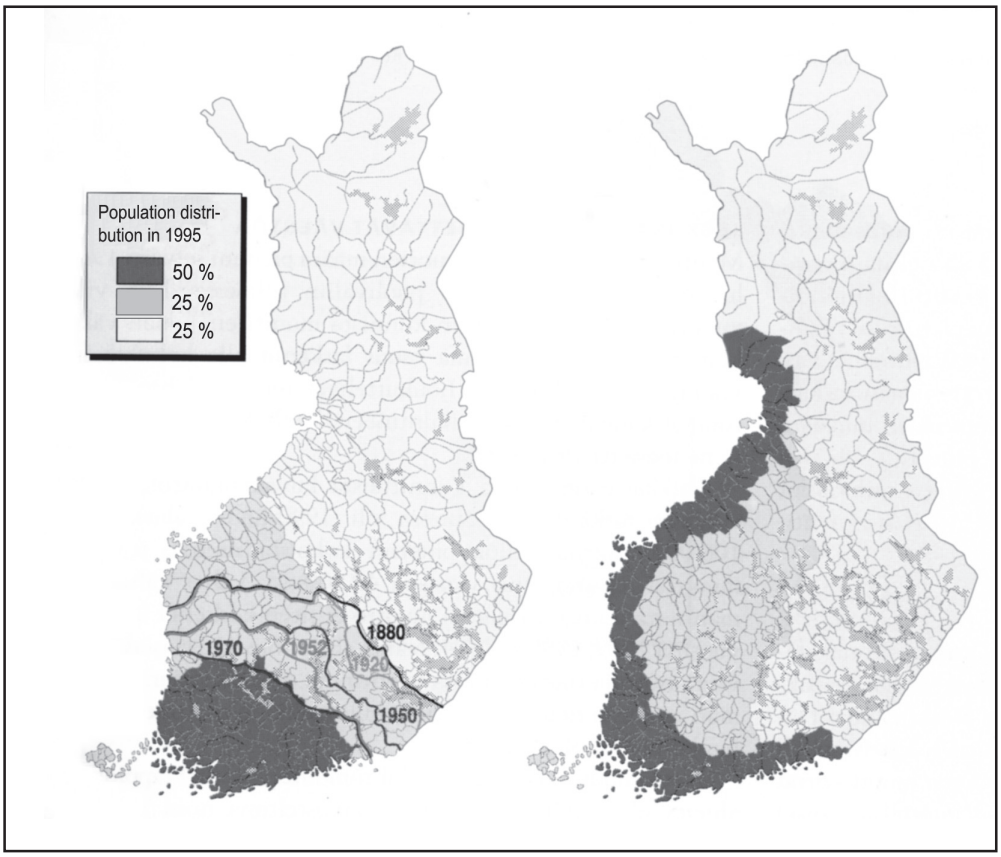

Figure 9. The development of the land area where the 50 % of population is living in Finland from 1880 to 1995 (see Hustich 1972; Westerholm 1999).

The goal is to get at least one regional centre to every county; the centre would have a versatile labour market and a stimulating social environment. An actively working regional centre is hoped to hinder the migration of young families into growth centres (Mainio 2000). The sub-regional units partaking in the program would themselves construct a program which they believe would make the area successful. When good projects emerge the ministry will provide a so-called seed money for them. The municipalities cannot create good jobs but by creating a pleasant and safe living environment the inhabitants and enterprises are believed to find their way into the area.

The eastern Finland is missing the actual growth centre. To develop that area it has been proposed a new idea to combine three cities, Lappeenranta, Imatra and Joutseno, to a larger urban area of 100 000 population. The name of the new city would be Saimaa according to the Lake Saimaa in that area. In the rank size order the city would be the seventh largest one in Finland. The Association of Finnish Local Authorities is promoting this action (Turun Sanomat 2001).

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