The Future of Rural Settlement Structure in Finland

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The structure of rural settlement in Finland is examined in the light of the structural and spatial processes of concentration and dispersal that have taken place in society, employing coordinate-based population and occupation variables supplied by the Central Statistical Office.

Future prospects for the spatial structure are seen to include a concentration of growth around a small number of provincial centers and the thoroughfares connecting them and in the region of the capital, Helsinki, while the traditional hierarchy of centers is expected to break down at the lower levels, i.e., where the small towns and centers of local administrative districts are concerned. The more remote country districts are in turn seen to be separating out into those struggling against the forces of depopulation, accounting for the majority of the traditional rural areas, and those deriving new growth potential from leisure-time activities.

RURAL AREAS AND STRUCTURAL CHANGE IN SOCIETY

The structural change which has been taking place in Finland at both the functional and the regional level during recent decades is characterized by increasing dominance of the service sector, the centralization of functions and settlement and the reinforcement of hierarchical systems. Consequently it also affects rural areas in a wide variety of ways (see Myklebost, 1987; Naukkarinen, 1987; 1990a; and 1990b; Oscarsson and Öberg, 1987; and Nordiska ministerrådet, 1990). A number of phenomena related to this change, such as the decreasing numbers of persons employed in primary production and the migration of population, are almost inevitably regarded as detracting from the development of the rural areas. Apart from the late 1960s and early 1970s, which were marked by a virtual flight from the rural areas and the adoption of both administrative and regional policy measures to increase the degree of industrialization in Finland, the changes have so far taken place in a fairly controlled manner without giving rise to any major problems.

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In contrast to the negative impacts, less attention has been paid by the public to the favorable outcomes of this development. The viability of agriculture and farming has improved markedly as excess labor has spilled over into other occupational sectors. The average farm size has increased, and mechanization and specialization in production have advanced rapidly. Thus the farmers' material standard of living has improved at a rate similar to that in other occupational sectors.

We shall look here at the structural and spatial processes of concentration and dispersal that have taken place in Finnish society and evaluate their effects on the future settlement structure of the rural areas, which are themselves highly diverse in character (see Naukkarinen et al., 1991b; Vartiainen, 1991). The extreme effects are represented by the sparsely populated areas lying outside the 'built-up areas', which are defined in Scandinavian terms as agglomerations with a minimum population of 200 persons, and the periurban zones around the metropolis of Helsinki. This may be considered as one part of the change in the country's spatial system. Scenarios for this have been constructed for the purposes of the 'Finland 2030' project (for instance Suomi 2030, 1989).

In addition to official statistical data, the material used for the present purpose includes grid square data for 1980 and 1985, provided by the Central Statistical Office of Finland, the usefulness of which is evaluated elsewhere (Naukkarinen et al., 1991a; 1991b; and Rusanen et al., 1991).

FACTORS GOVERNING TRENDS IN THE SETTLEMENT STRUCTURE OF RURAL AREAS

The factors which govern changes in the structure of rural settlement can be divided into those which constitute a threat to the conditions and way of life in such areas and those which open up new favorable possibilities. In Finland it is the former that have been subject to more extensive public discussion to date. The peripheral location of Finland at the extreme limit of the inhabited world as characterized by austere natural conditions result in sparse settlement. This, in turn restricts functional capacities and increases costs. This constitutes the general framework within which all improvement and development must take place. The sharp decline in the contribution of agriculture and forestry to employment and the reduction in the number of farms had disastrous effects on the development of the outlying areas in particular. No improvement in this situation is likely in the foreseeable future. In the latest agricultural policy statement by the National Board of Agriculture it is suggested, for instance, that by the year 2000, the number of farms should be reduced to about a third of the current figure, i.e., to approx. 45,000, in order to make agriculture internationally competitive (see also Forsström, 1990). This will evidently require a revision of current regional policy in Finland along EEC lines (Sisäasiainministeriö, 1991). This means that the creation of jobs in rural areas will be uncertain and outmigration will continue and even accelerate. It is thus feared that even less attention will be paid to the development of rural areas in the new international situation.

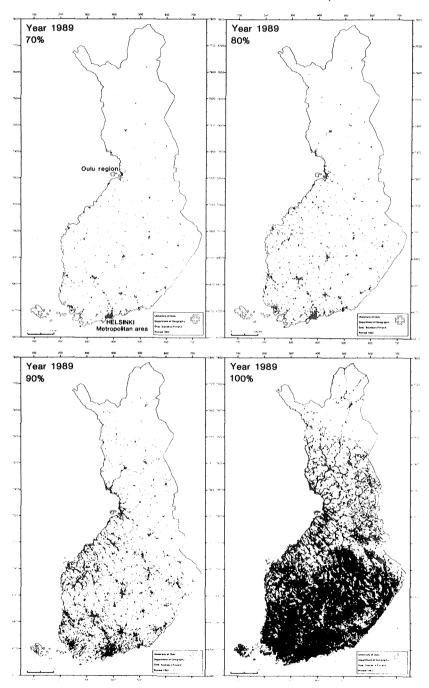
Signs of increasing regional inequality have begun to emerge in the course of changes which occur in the regional structure of Finland. This is evident in the form of a centralization of employment, particularly the creation of new jobs, in a restricted number of growth areas, and in the reduction of private and public service networks. The Finnish regional policy as pursued in the last few decades, which aimed at an equal distribution of affluence, has now begun to collapse. The major core areas, led by the capital, Helsinki, and followed by some provincial centers, have achieved a more dominating position than ever (see Kosonen and Tervamäki, 1989), whereas centers at the town level are struggling to survive under the threat of contraction in its many forms. Only a small number of centers in the rural areas have the necessary potential for development, but the majority is faced with increasing problems. The process of growth which involved all categories of centers in the 1970s and 1980s is thus coming to favor an ever smaller number of places which represent the highest hierarchical levels. Indications of this are also to be seen in the data on changes in the quartile distribution of population density in the 1980s (Table 1), where the fourth quartile, representing the sparsely populated areas, had expanded in relative terms by 1989 to cover over 95 percent of the inhabited grid squares.

Table 1: Concentration of population in Finland by quartiles in 1980, 1985 and 1989 according to grid square data from the Central Statistical Office of Finland.

	1980 No. of grid		1985 No. of grid		1989 No. of grid		1989 Popul./
P	squares	%	squares	%	squares	%	grid square
1. quartile	292	0.3	324	0.3	348	0.3	2,089
2. quartile	891	0.8	925	0.9	953	0.9	834
3. quartile	5,270	4.9	4,330	4.0	3,844	3.6	108
4. quartile	100,945	94.0	101,923	94.8	101,117	95.2	1
Total	107,398	100.0	107,502	100.0	106,262	100.0	
Population	14,606,972		4,846,190		4,908,320		

Figure 1 represents an attempt to employ cumulative concentration data to describe the structure of settlement in Finland for both the hierarchy of urban built-up areas and the sparsely populated rural areas. The first map shows the one km² grid squares which contain the 70 percent of the population living in the areas of greatest density. This map shows the system of urban centers in Finland, including the location of the major distribution centers for the rural areas.

Figure 1: Cumulative distribution of population in Finland in 1989 (grid square data from the Central Statistical Office of Finland).



The maps of the distribution of 80 percent and 90 percent of the population then serve to demonstrate the manner in which urban settlement is extending into the rural areas. Finally, the 100 percent map denotes all the grid squares which were inhabited in 1989. Migration in the coming years can be expected to shape this distribution very much to the form represented at present by the 90 percent map.

In addition to population figures, data on changes in age structure in particular provide a more solid basis for an evaluation of future development. An examination of changes in age structure between 1980 and 1985 shows the number of children under school age and the number below employment age in general to have decreased. Two trends were visible in the working-age population, examined in 10-year groups. The number of young people of working age decreased in absolute terms within the first two age groups, i.e., up to 35 years, whereas the number of older working people, especially those of age 35–44 years, increased markedly. Although less radical changes were observed in the older age groups, in general the proportion of old people increased fairly rapidly during that period, as is also evident from the rise in the median age.

As mentioned above, the population of Finland is becoming markedly more centralized, i.e., becoming concentrated in given areas. As far as the various age groups are concerned, this trend has been most prominent among children under school age, as indicated by the fact that as many as 58.7 percent of the inhabited square grids within the map of Finland contained no children under school age in 1985, and 43.5 percent contained no population at all under working-age (cf. Naukkarinen et al., 1991b).

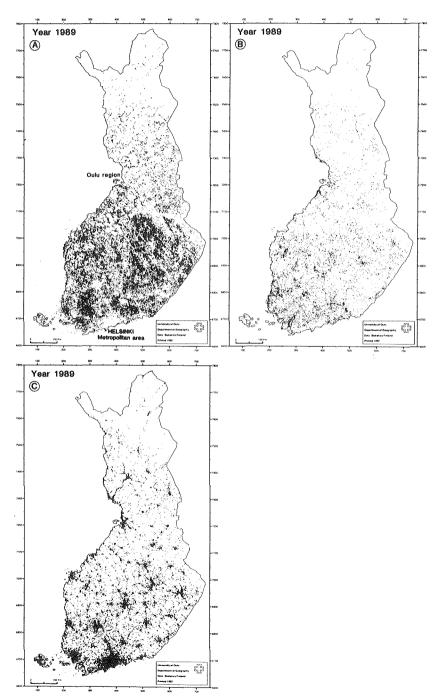
The most marked areal concentration among persons of working age in 1985 was recorded for young people who had gone out to work and become independent of their parents, the highest figures for this trend being found among persons of age 25–34. On the other hand, it is also interesting to note that the different age groups were all represented in a similar number of grid squares, although this does not mean that their areal distributions are the same, for areal dispersal was more marked and centralization less intense among the oldest people of working age than among the young people.

The areal distribution of the retired population is deviant in that, on the one hand, these people represented the highest degree of centralization of all, while on the other, they were to be found in the largest number of inhabited grids. Only a third of the grids failed to contain any elderly people.

The rapid change in the occupational structure of the population, from a society characterized by agrarian functions to one dominated by the service sector, is primarily evident in the spread of urban settlement patterns and the diversification of the rural occupational structure (see Fig. 2, in which the dominant occupational sector for each grid is presented for technical reasons in three maps, and Table 2, in which the change in occupational diversification is considered according to the place of residence of the employed labor during the 1980s).

Figure 2: Employed labor according to place of residence in Finland in 1989 (grid square data from the Central Statistical Office of Finland).

Dominant source of livelihood: A) primary production, B) manufacturing and C) services.



This is accompanied by ashift in the role of rural areas from regions of primary production to locations for leisure-time activities. This trend, particularly typical of countries with a more advanced economy (see Clout, 1972; and Gilg, 1985), has opened up new part-time and full-time employment opportunities for persons living in rural areas. Already an increasing number of those living in rural areas are persons responsible for maintaining and preserving the property of relatives who have moved to urban centers, persons who have inherited property in the countryside, or urban inhabitants who have purchased a rural dwelling for leisure-time purposes. Thus the census of 1990 revealed that more than one household-dwelling unit in five had a free-time residence, and that the number of free-time residences had increased by more than 46 percent since 1980 (SVT, 1992).

Alongside normal tourist services, a wide variety of leisure-time activities have originated in recent times to provide amusement for townsfolk spending their holidays in a country cottage. Although these are only isolated phenomena at the moment, they may be regarded as indicative of the direction in which things are moving. Elements of physical well-being which have to do with nature in particular may well constitute a new resource base for rural areas in the future, despite the fact that the drawbacks of urban development have so far remained minimal in Finland.

Table 2: Employed labor according to place of residence and dominant source of livelihood by grid squares in Finland in 1980, 1985 and 1989 (data from the Central Statistical Office of Finland).

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Dominant occupation	No. of grid squares	%	No. of grid squares	%	No. of grid squares	%
Primary production	489,937	51.2	42,770	45.4	35,603	38.7
Manufacturing	15,723	16.5	13,728	14.6	13,961	15.2
Services	18,499	19.3	23,483	25.0	27,566	30.0
No dominant source of live- lihood	12,464	13.0	14,150	15.0	14,860	16.1
Total	95,623	100.0	94,131	100.0	91,990	100.0
	No. of em- ployed labor	%	No. of em- ployed labor	%	No. of em- ployed labor	%
Primary production	256,599	12.0	209,377	9.2	163,810	6.9
Manufacturing	416,964	19.5	271,681	12.0	222,340	9.4
Services	1,406,661	65.6	1,721,965	75.8	1,905,006	80.6
No dominant source of live- lihood	63,151	2.9	68,500	3.0	71,053	3.0
Total	2,143,375	100.0	2,271,523	100.0	2,363,309	100.0

FUTURE OF THE SETTLEMENT STRUCTURE OF RURAL AREAS

Changes in the structure of settlement in rural areas were first characterized by a reduction process taking place in sparsely populated areas. The resulting harmful effects were partially compensated for by local urbanization. Thus the centers of the rural administrative districts in particular expanded rapidly as the society became increasingly dominated by the service sector, a process in which improvement of the basic and welfare services provided by the state played a prominent role. Finland is now facing a situation, however, in which an increasing number of small rural centers and even some major centers which provide administrative and other services for the surrounding region have already been subjected to contracting forces. This process seems to be inexorably gaining in momentum, and it would appear that only an extremely small number of continuous areas of rural settlement will survive in Finland, with centers of cumulative growth developing inside them and occasionally elsewhere.

The southern coast of Finland will constitute a continuous belt of cumulative population growth, a link between Finland and the urban system of Europe. This trend supports the view of the planners who presented a scenario centered on the capital city, in the 'Finland 2030' report (Suomi 2030, 1989). The pressures of urban land uses will be greatest in these rural areas, and any changes in settlement structure will take place on conditions dictated by the cities. Another prominent zone of urbanization will be created along a line between Helsinki and Tampere. In addition to these, the university cities and the areas immediately surrounding them would seem to be the only ones which will manage to maintain a growth trend, but the areas concerned will be reduced to starshaped patterns or individual spots which stand out distinctively from the rest of the surrounding rural area. The smaller rural centers, which are currently facing decline, will adopt a more prominent local role as providers of a variety of essential services.

Although the sparsely-populated areas located outside the network of the major centers will continue to lose population, it is possible that the process will be checked or reversed. High-quality leisure-time communities are being created at a number of sites of natural beauty in the Lake Region, the coastal areas and the fjells of Lapland. These communities occupy a prominent position in some local authority districts of otherwise declining fortunes and represent examples of new changes in settlement structure which concern rural areas in particular.

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