The Distribution of Economic Well-being within a Remote Rural Region

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For many years, geographers have concerned themselves with the spatial dimension of economic development and with the fact that the pattern of development, whether it occurs under capitalist or socialist regimes, tends to result in a clustered form associated with urban centres (Bryant, 1984). Rural regions have tended to lag, both socially and economically, giving rise to rural-to-urban migration in search of economic opportunities. In recent years, however, it is interesting to note that the reverse pattern of movement has been in vogue in many developed industrial nations, giving rise to such terms as 'population turnaround' and 'counterurbanisation' (Cloke, 1985).

Under laissez-faire capitalism, the tendency has been for richer regions to increase in wealth and for poor regions to decline, resulting in significant disparities in a whole range of social and economic indicators. This pattern has been typical of Irish economic development, but the growth in disparities and in population out-movement has been reduced to some extent by state intervention through regional development policies. Since the 1960s, Irish governments have opted for a policy of dispersed employment opportunities, despite the Buchanan Report (1968) which recommended a concentration strategy. This policy has been operationalised mainly through the agency of the Industrial Development Authority (IDA), and to a lesser extent through the smaller agencies of Udaras na Gaeltachta, operating in the Irish-speaking western fringe areas, and Shannon Free Airport Development Company in the mid-West Region. The objective of this policy was to provide employment opportunities principally through manufacturing industry, as close to the labour force as

possible, thereby stemming the out-migration of the rural population overseas and their internal migration to the large urban centres, particularly Dublin. This policy has had considerable success during the past few decades, although the problem of rural out-migration has not been solved as evidenced by the results of the 1986 Census of Population, which reveal significant outflows during the previous five years.

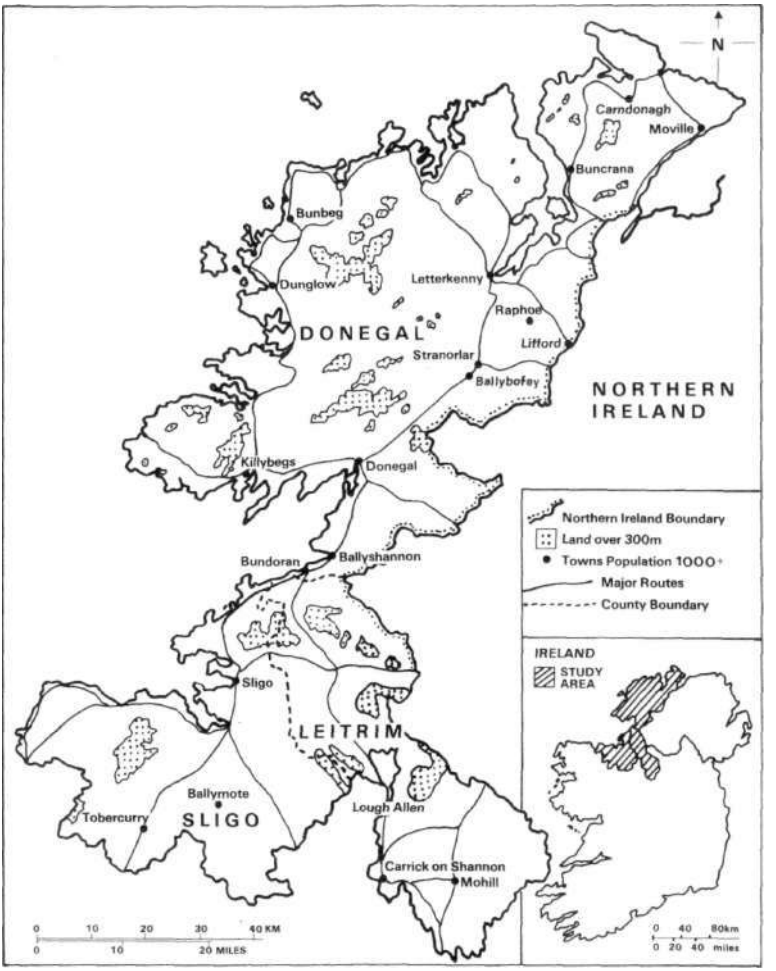
Much of the attention given to spatial inequality in Ireland has focused at the scale of the planning region, while little attention has been given to the extent of spread of development at a more local scale (Gillmor, 1985). At the community level, however, there is considerable concern for a greater diffusion of economic opportunities and this is frequently expressed both in a political manner and in local reaction to the achievements of agencies such as the IDA. The traditional approach to job creation has been mainly through the provision of advance factories for the manufacturing sector. The mechanics of such provision has usually resulted in urban centres being the most likely locations for industrial sites and their associated infrastructure.

The targeting of jobs in clusters of towns (often quite modest in size) by the IDA has led to a considerable dispersion of manufacturing industry throughout the country. There has been little analysis to date, however, of the degree of dispersion of such employment opportunities at the local level within Irish rural regions (Grimes, 1987). This article will attempt to address this lacuna in Irish rural geography. The objective is twofold: firstly to delimit, with the aid of principal component analysis, different levels of economic and social well-being within the Northwest region of Ireland (Fig. 1).* The second objective is to help explain some of this variation by an examination of non-agricultural employment growth during the 1970s.

While the emphasis on manufacturing industry as the major solution for providing non-agricultural employment in rural

*In this study, the Northwest region is made up of three counties: Donegal, Sligo and Leitrim. For planning purposes, Donegal is a separate region and hence the interchange in this article between the Northwest and the Northwest/ Donegal.

Figure 1: The Northwest Region



areas has been reduced in recent years, with a greater realisation of the value of the service sector, there has been little analysis to date of the contribution of this sector (Conniffe and Kennedy, 1984). There is a general tendency to regard the public service (which in the context of rural regions has been an important growth area in job provision) as a parasitic activity rather than a producer of wealth. To some extent this attitude is understandable, particularly because of the very rapid expansion of this sector in the 1970s and the subsequent period of cutbacks during the more recent past. This article, however, will also attempt to pay some attention to this second area of job provision (namely, the service sector) particularly during the 1970s.

While economic development is notoriously difficult to define in an acceptable fashion, and even more so in a rural context, the usual criterion used is income. But other criteria include population growth and employment opportunities. In analysing spatial inequality, geographers have resorted to such terms as 'rurality'(Cloke, 1987) and 'well-being'(Knox, 1974), to try to come to terms with a concept encompassing economic and social differentiation in space. In delimiting levels of development or well-being, some researchers have employed the use of principal component analysis to reduce a large number of census-based variables to one indicator. A similar approach is adopted in this article. The data are derived from the Small Area Statistics based on the District Electoral Division, or DED — the smallest unit for which census data are available.

Although the Population Census provides a wide range of variables based on the DED, the actual phenomena being measured are rather few in the final analysis: the major areas include the age/ sex structure of the population together with characteristics of housing and employment. Additional aspects, such as education level and stage in life cycle, were added for the first time in 1981. In limiting the analysis to census data, therefore, the determination of an index of 'development' or 'well-being' is rather narrow, being based on the demographic, housing and employment characteristics of small areas. Nevertheless, bearing in mind the limitations of the data, it is possible to obtain some indication of the spatial variation of this indicator throughout the region.

The Northwest Region

There is ample evidence to show that the Northwest region is the poorest in the Irish state. In 1961, Donegal, Sligo and Leitrim (making up the NW region) and the West region were designated for special state aid on the basis that these regions had the highest agricultural share of total employment of the nine planning regions and the lowest industrial shares of total employment. In an analysis of regional performance, O'Neill (1977) showed that the NW was on the positive side of the national average in only 3 of 17 indicators and that the region performed very badly in the areas of housing, health and social amenities.

Ross (1980) has shown that the NW region was still dependent to a considerable extent on primary production in 1977 relative to the state as a whole. While income from manufacturing did increase during the 1970s, dependence on government transfers was still very high. Taking the national average in per capita income as 100, Ross (1980) has shown that deviations of the Northwest/Donegal region from this national average were -23.4 in 1977, -23.6 in 1973 and -24.4 in 1960. .The high level of dependence on agriculture was still reflected in the 1983 per capita income, which was only 77% of the national average (Brady, Shipman, Martin, 1986).

Variable Selection

While it has been acknowledged that the conceptualisation of 'well-being' or 'development' used in this study is constrained by the selection of census variables, nevertheless this conceptualisation has a good logical basis within the Irish rural context. The focus is on employment opportunities in the non-agricultural sector, since a significant dependency on agriculture would indicate a low level of well-being or economic opportunity. Such a lack of opportunity in this remote region has lead in the past to extensive out-movement of the younger age-cohorts. This out-movement has not been stemmed despite the improvements in job provision that were achieved during the 1970s. For the first time, however, since the mid-nineteenth century, there was a net in-flow of migrants into parts of the NW region, particularly into Co. Donegal.

The long period of out-migration from the region reveals

all the negative demographic characteristics of a decaying area, such as depopulation, imbalance between the sexes, ageing and a high male celibacy rate. Such demographic characteristics, therefore, can be used as part of the composite indicator to establish varying levels of well-being throughout the region. Additionally, the varying level of income and wealth in the region might be expected to be manifested through the quality of housing amenities.

While it would be quite inaccurate to equate a high level of economic well-being in rural areas with a positive demographic composition and good housing quality in the urban context, because of the link between the migration system and the labour market, such characteristics do generally indicate areas of progress, particularly when linked with opportunities outside agriculture. The major source of contrast between the less well-off population within urban and rural areas is the extra source of income available to rural dwellers, in addition to social welfare, through the family farm. This resource, therefore, creates a more complex pattern of income composition than that which is prevalent in urban areas.

A second major contrast is the propensity of younger members of the rural community to leave when off-farm employment opportunities are restricted. This results generally in the considerably higher unemployment rates in large parts of urban centres. During the 1970s, however, particularly in Co. Donegal, the pattern was complicated with the return movement of migrants to this rural region, giving rise to high rates of unemployment in that county.

Beginning with the 1981 Population Census, which provided a wider selection of variables than that of 1971, an exploration of possible variables to include in the principal component analysis was made. Initially, 42 variables for the 309 DEDs were selected, relating to occupational background, demographic composition, housing amenities and educational level. A further 9 variables were included and dealt with land quality (agricultural census), population density, measures of road distance from each DED mid-point to the nearest towns of 1,000+ persons and 5,000+ persons, and a measure of road quality. Finally, 12 variables were added, examining aspects of population change, migration and occupational change

during the 1970s. Thus, a total matrix was compiled of 63 variables for the 309 DEDs.

The initial data matrix of 63 variables was gradually pruned to 35 variables, before running the principal component analysis. This pruning was based, firstly, on identifying variables that were members of reasonably closely related sets and, secondly, on excluding tautologous variables. Tautologous variables arose in relation to occupational background, where highly intercorrelated variables measured the same phenomenon; they were also present in demographic measures because the male and female populations were examined separately at first, but many of the distinctions were found to be superfluous.

Principal Component Analysis

The problem of reducing the set of 35 variables to a more manageable set of socio-economic indicators is solved by using a principal component analysis. The technique treats the actual variables as imperfect indicators of the underlying factors (components) and extracts the best set of factors to fit the data. The component that emerges from the analysis can be used as a summary of the original variables.

The 35 variables were first analysed using the 1981 data. This produced a highly intercorrelated matrix with only 59 of the 612 correlations not being significant at the 0.05 level. The unrotated principal component accounted for 37% of the total variance, while the second component accounted for only 9.5% of variance and the third component, only 6.9%. Regarding the principal component, Table 1 shows the highest loading scores on 19 of the variables. Three groups of variables had high loadings: demographic, housing amenities and occupation. Variables with a positive loading above 0.5 included those showing areas with youthful population, with young children, population increase, good housing and a high proportion of males in non-agricultural occupations. Variables with negative loadings include those showing areas with an ageing population, old housing and low levels of education among adults. Among the variables in the initial run which had loadings of less than 0.5 were the following: male unemployment, distance from towns (1,000+ and 5,000+),

Table 1: **Loading Scores on Component 1 (1981)**

	Variable	Loading Score
1.	% females 15-44	0.90203
2.	Population growth 1971–1981	0.88901
3.	% of families with at least one child under 15	0.86846
4.	% of population 0–14	0.85557
5.	% males 15–44	0.85323
6.	% of housing units with flush toilet	0.83099
7.	% of occupied males in non-farm employment	0.82014
8.	% of population 65 and over	–0.78518
9.	% of occupied males in categories Transport — Professional*	0.77344
10.	% of housing units with no piped water	0.71670
11.	Average no. of persons per household	0.71108
12.	% of all houses in 1981 built before 1919	–0.70023
13.	Family units as % of all households	0.64372
14.	% of males 45–64, single	–0.62506
15.	No. of 15–19 year olds in 1981 as % of 5–9 year olds in 1971	0.61109
16.	No. of females per male (15–44)	0.57468
17.	% of 60 year olds that left education at primary level	–0.56352
18.	% of all houses in 1981 built since 1971	0.55672
19.	No. of 30–44 year olds in 1981 as % of 20–34 year olds in 1971	0.54556

*Transport — Professional = aggregate category made up of the following occupations: transport, clerical, commerce, service and professional.

population density and males in production and labouring occupations.

The second stage of the analysis involved a reduction in the number of variables to 12, by omitting variables with low loading scores in stage one. Table 2 shows the ordering of the 12 variables selected for the second run based on 1981 data. It is interesting to note that the pattern differs little from the initial run, which was based on 35 variables. This is not surprising since the second run was based on the 12 variables in the initial stage with the highest loading scores and the principal component in this case accounted for 58.7% of the overall variance. As in the previous run, the positive loadings point towards a youthful population, population increase, good housing amenities and non-agricultural occupations, while the negative loadings refer to ageing of the population and a high male celibacy rate.

Table 2: **Loading Scores on Component 1 (1981)**

	Variable	**Loading Score**
1.	% females 15-44	0.92895
2.	Population growth 1971-1981	0.88901
3.	% of population 0-14	0.89435
4.	% of population 65+	-0.80429
5.	% of housing units with flush toilet	0.79745
6.	% of occupied males in non-farm employment	0.78318
7.	% of occupied males in categories Transport — Professional*	0.76740
8.	Average no. of persons per household	0.72116
9.	No. of 15-19 year olds in 1981 as % of 5-9 year olds in 1971	0.61109
10.	% of males 45-64, single	-0.62506
11.	No. of 30-44 year olds in 1981 as % of 20-34 year olds in 1971	0.54556
12.	No. of females per male (15-44)	0.58022

Transport — Professional = aggregate category made up of the following occupations: transport, clerical, commerce, service and professional.

In the third stage of the analysis, the variables were further pruned by omitting the three population change variables for the decade 1971-1981. This was for purposes of comparing the index for both 1971 and 1981 separately, and obviously the basis for correlation between the change variables and those for 1971 and 1981 would be quite different. The ordering of variable loadings on the principal component is shown in Table 3. Again, the pattern is very similar to the previous one despite the absence of population increase in second place. The principal component for 1981 using the 9 variables accounted for 62% of the variance.

Table 3: **Loading Scores on Component1 (1981 and 1971)**

1981		1971	
Variable	**Loading**	**Variable**	**Loading**
1. % females 15-44	0.87817	Flush toilet	0.85213
2. % pop. 0-14	0.84657	% non-farm males	0.84397
3. Flush toilet	0.83646	% males in Transport-Prof. *	0.82767
4. % pop. 65+	-0.82779	% pop. 65+	0.75787
5. % Non-farm males	0.81655	% females 15-44	0.73945
6. % males in categories Transport — Professional*	0.79176	Average size of household	0.71472
7. Average size of household	0.75593	% pop. 0-14	0.69752
8. % males 45-64, single	-0.67965	No. of females per male (15-44)	0.66204
9. No. of females per male (15-44)	0.61895	% males 45-64, single	-0.67965

Transport — Professional = aggregate category made up of the following occupations: transport, clerical, commerce, service and professional.

Table 3 also shows the variable loadings on the principal component for the 1971 data, using the same 9 variables as for 1981; in this case, 56.6% of the variance was explained.

While the basic pattern of variable loadings on the principal component has remained the same throughout the decade, the order of loadings by different variables has changed to some extent. The negative loading of ageing has remained in fourth place, while the second negative loading of male celibacy has switched places with the female/male ratio, the latter two variables being placed in eight and ninth positions in both 1971 and 1981. In 1981, demographic variables came first, followed by housing amenities and employment. In 1971, housing amenities were in first place, which indicates the progress in this area during the decade. Non-agricultural employment came second and third in 1971, but these two variables had dropped to fifth and sixth place by 1981. The youthfulness of the female population, together with a high proportion of children, moved from fifth to sixth places in 1971 to first and second places in 1981.

Before considering the spatial pattern of factor scores, Table 4 indicates the range of values of some of the main variables, distinguishing between DEDs having a town of 1,000+ persons, DEDs with a town or village of less than 1,000 persons and DEDs without a town or village. The extent of change in these variables during the 1970s is shown. There has been a considerable decline in the proportion of gainfully occupied males involved in agriculture because of the growth in non-farm occupations. This occupational transformation has been more complex than the data would suggest, because of the increasing importance of part-time farming in a variety of guises. The main point to notice is that while there has been a significant decline in agricultural employment, particularly in the most rural parts of the region, the contrast between Co. Donegal and the other two counties remains larger than ever.

A similar contrast is evident in relation to the improvement in housing amenities, with Co. Donegal's rural areas having progressed much further than the other two counties, Co. Leitrim being in third place. While Donegal's population has retained its lead over the other two counties regarding its youthfulness, male celibacy has remained depressingly high in all three counties.

Table 4: **Changes in Selected Variables during the 1970s**

	County	**Towns**		**Village DEDs**		**All DEDs with no town or village**	
Variable		1971	1981	1971	1981	1971	1981
%MalesO-14	Leitrim	32.9	31.6	28.4	26.7	24.2	24.3
	Sligo	33.5	30.6	29.7	25.7	25.7	26.6
	Donegal	33.0	33.5	29.3	30.6	27.2	30.2
% Females 0-14	Leitrim	29.3	27.4	28.0	27.6	27.3	26.2
	Sligo	29.2	26.7	29.1	29.4	28.2	28.7
	Donegal	29.7	31.1	29.7	31.5	29.6	31.6
% Males 65+	Leitrim	13.7	14.3	15.6	16.2	17.3	18.0
	Sligo	10.3	10.4	12.7	13.7	15.5	15.7
	Donegal	10.4	10.4	13.7	13.6	15.2	14.7
% Females 65+	Leitrim	13.6	15.8	17.5	16.6	18.6	19.0
	Sligo	12.9	13.3	14.5	14.6	17.1	16.3
	Donegal	11.9	12.4	15.1	15.1	16.2	15.3
No. of single	Leitrim	1.3	1.0	0.7	0.7	0.5	0.5
females per male	Sligo	1.0	1.0	0.8	0.8	0.5	0.6
15-44	Donegal	1.0	0.9	0.7	0.7	0.6	0.6
% Males 45-64	Leitrim	29.0	22.4	36.4	33.1	40.6	42.3
who were single	Sligo	27.7	25.3	30.6	30.0	38.7	38.6
	Donegal	23.5	22.1	34.3	32.0	41.7	39.6
Average no. of	Leitrim	4.7	3.7	3.6	3.4	3.3	3.3
persons per	Sligo	4.7	4.0	3.7	3.7	3.5	3.5
household	Donegal	4.5	4.1	3.9	3.8	3.9	3.8
% of housing	Leitrim	100.0	97.7	55.7	80.2	21.8	58.6
units with flush	Sligo	99.1	99.3	57.6	79.0	31.5	66.2
toilet	Donegal	94.4	97.0	55.1	83.9	35.3	74.2
Farmers as %	Leitrim	2.1	3.6	35.2	28.4	57.8	46.9
of gainfully	Sligo	1.5	1.7	32.8	23.8	52.4	44.1
occupied males	Donegal	2.8	2.3	26.4	19.5	39.2	28.4

The Spatial Dimension of Economic Well-being

Figures 2 and 3 illustrate the spatial spread of economic well-being within the Northwest region in 1971 and 1981. The pattern is very similar for both years, with the highest positive scores having a very restricted distribution in the Sligo/ Leitrim area (mainly around Sligo Municipal Borough) and a much more dispersed pattern in Co. Donegal. Figure 1 reveals the close relationship between areas of higher well-being and the location of towns with a population of 1,000 or more persons. Much of north Leitrim and of west-central Donegal is made up of mountainous terrain; not surprisingly, therefore, these area have a low level of well-being. It would appear also that among the reasons why Co. Donegal has a more even spread of well-being than Sligo/Leitrim is the presence of a dozen towns of 1,000 or more persons, well-distributed throughout the county.

Sligo Municipal Borough, with more than 15,000 persons in 1981, was the largest town in the region and it would appear that much of the development in that part of the region has been concentrated in and around this urban centre with little benefit accruing to the more rural areas. The major area of development in Co. Donegal is in the north and east, close to the Northern Ireland border and centring on Letterkenny, the county's largest town with almost 8,000 persons. Despite the many negative influences of Northern Ireland's recent troubled past, it would appear that eastern Co. Donegal has at least maintained a good level of well-being relative to other parts of the region. The northwest corner of Donegal has also progressed, mainly as a result of the work of Udaras na Gaeltachta, the industrial development agency which promotes Irish-speaking areas. Recent years have seen, for example, the expansion of Bunbeg into one of the county's dozen towns with more than 1,000 persons.

Changes in the spatial spread of economic well-being in the Northwest region during the 1970s have been very few, with the same basic distribution pattern being maintained. The pattern for both 1971 and 1981, and for the component runs based on 9 and 12 variables are summarised in Table 5. The effect of omitting the three population change variables has no real impact on the predominant pattern: it tends to

Figure 2: DEDs classified by Component 1, 1971

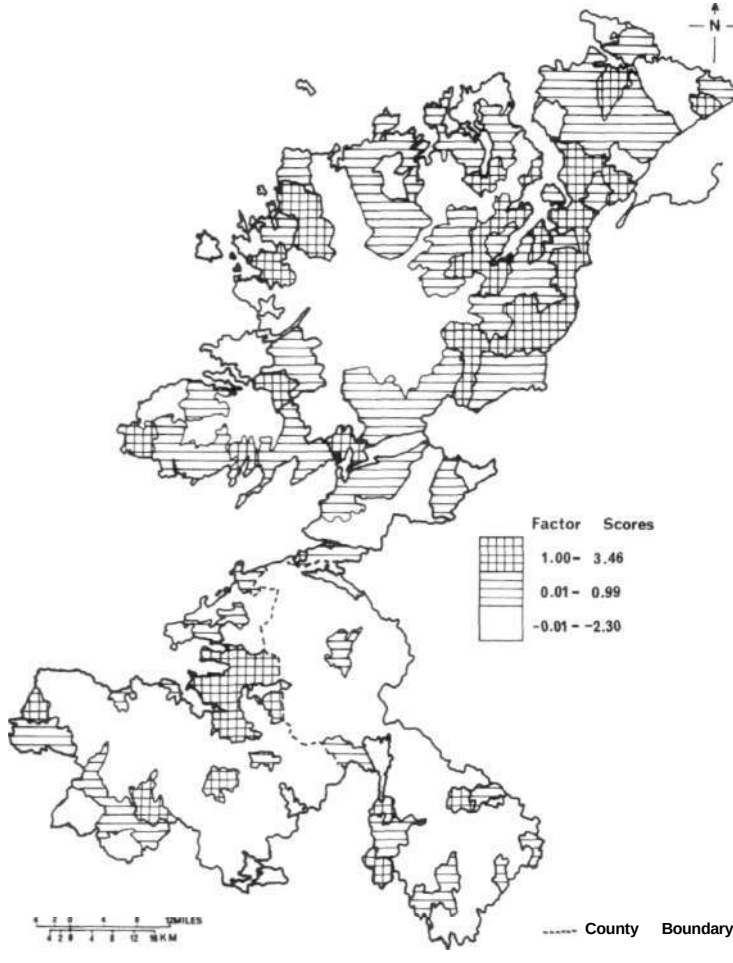
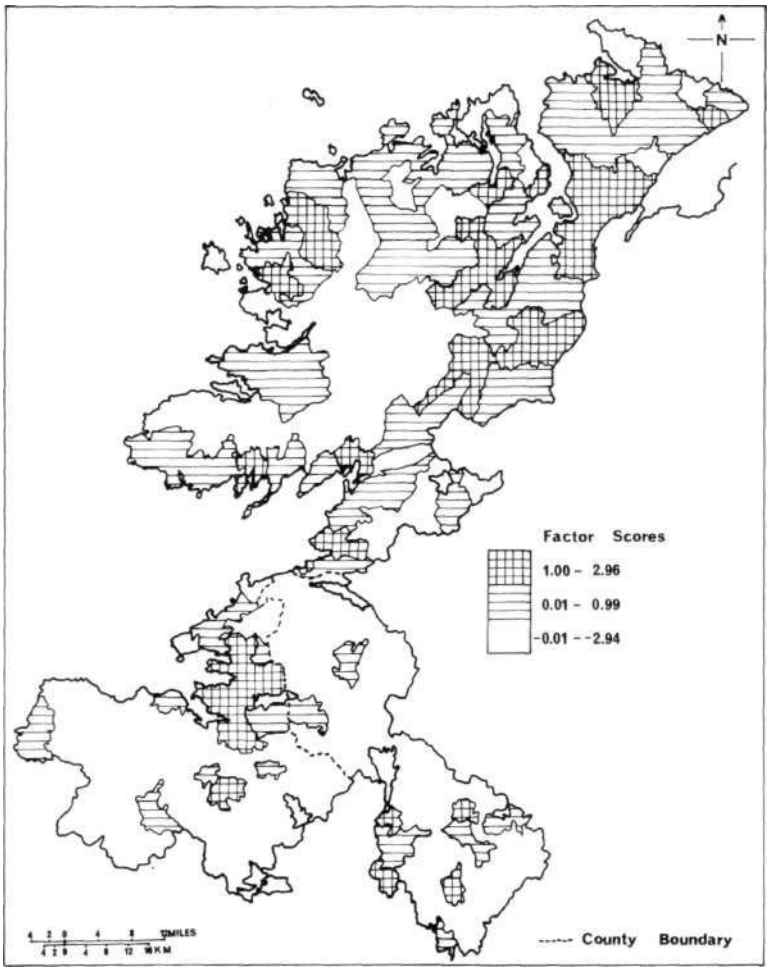


Figure 3: DEDs classified by Component 1, 1981



the decade coincided with the expansion in the public service. This was particularly evident in the case of Co. Sligo, where Sligo Municipal Borough acts as a regional centre for such activities as health, education, industrial training and agricultural administration.

Residential Patterns of Non-Farm Workers

It is possible to examine the degree of rural population participation in the non-farm labour market by using the census data based on place of residence. Since much of this employment is town-centred, the potential for participation is related to the degree of dispersion of such employment and the mobility of the rural workforce.

Table 8 shows the changing distribution of male and female non-farm workers in three categories of DEDs. Apart from a very modest increase in the number of female non-farm workers, the urban DEDs (with towns of 1,000+ persons) in all three counties maintained their position throughout the decade. It is clear, too, that Co. Sligo continued to have the most urbanised non-farm workforce, both for males and females. The village DEDs showed an overall decline, but this can be partly explained by the fact that some villages had grown into towns of 1,000 or more persons by the end of the decade. The net result, therefore, was a reasonable improvement in the proportion of non-agricultural workers residing in the most rural DEDs.

By examining the non-farm male workforce by sector (Table 9), it is clear that the level of residential concentration varied considerably. While Co. Sligo had a very urbanised workforce, the general pattern in each county was for Production and Labouring workers to be more numerous in rural areas, and for Transport, Clerical, Commerce, Service and Professional workers to be the most urban-centred categories. This suggests the existence of two distinct workforces — a rural-based agricultural population involved to some extent in Production and Labouring, and a town-based non-agricultural workforce, partly made up of in-migrants to the region and mainly involved in public service employment.

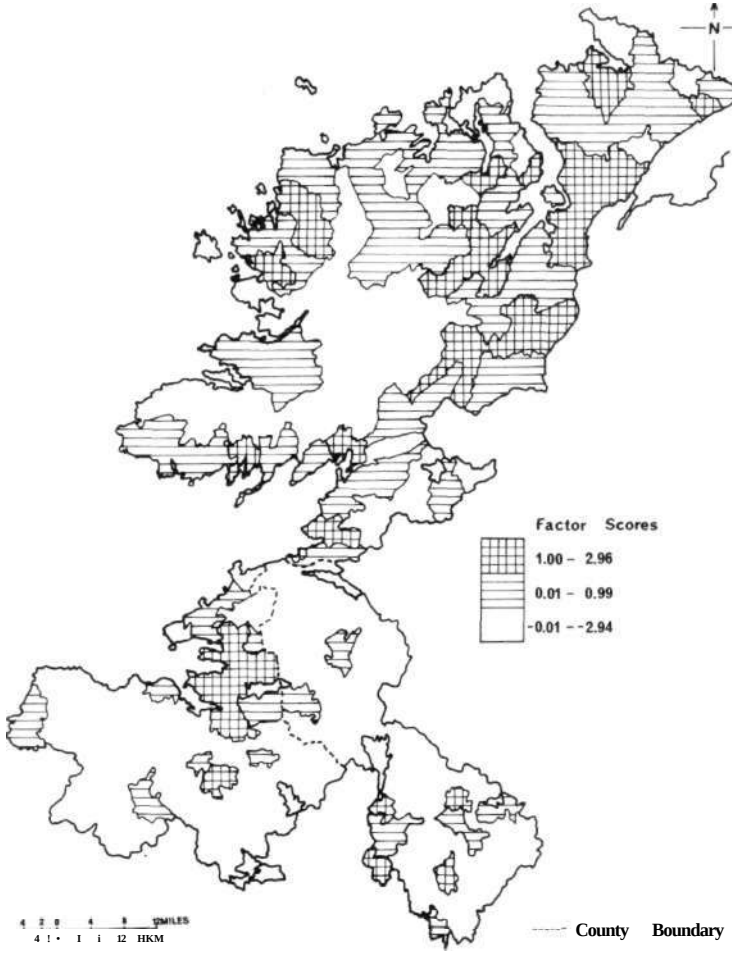
Table 8: **Percentage Distribution of Male and Female Non-Farm Workers by County (1971 and 1981)**

	Co. Leitrim				Co. Sligo				Co. Donegal			
	1971		1981		1971		1981		1971		1981	
	M	F	M	F	M	F	M	F	M	F	M	F
DEDs with towns 1,000+/Pt	9.47	14.47	11.70	14.90	43.15	45.67	42.90	50.20	27.35	28.70	27.50	32.60
Village DEDs	37.24	39.04	28.20	31.30	20.69	22.10	14.30	13.00	31.59	30.70	26.70	25.30
DEDs excluding towns and villages	53.29	46.49	60.10	53.80	36.16	32.23	42.80	36.80	41.06	40.90	45.80	42.10
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 9: **Percentage Distribution of Non-Farm Male Workers by Sector (1981)**

	Other Agfis	Production	Labourer	Transport	Clerical	Commerce	Service	Professional	Other
					Co. Leitrim				
DEDs with towns 1000+/Pt	1.7	8.7	7.6	15.1	24.8	21.3	17.2	18.9	10.6
Village DEDs	22.6	24.1	24.1	29.8	28.8	42.1	39.1	39.0	27.9
DEDs excluding towns and villages	75.7	67.2	68.3	55.1	46.4	36.6	43.7	42.1	61.5
Total number of workers	751	1687	601	352	149	555	261	466	179
					Co. Sligo				
DEDs with towns 1000+/Pt	6.9	41.5	35.3	49.5	54.2	49.6	53.4	49.4	53.3
Village DEDs	16.7	12.2	15.7	13.1	12.1	17.5	12.9	15.0	16.8
DEDs excluding towns and villages	76.4	46.3	51.0	37.4	33.7	32.9	33.7	35.6	29.9
Total number of workers	796	3374	998	1034	387	1417	595	1522	398
					Co. Donegal				
DEDs with towns 1000+/Pt	12.4	26.8	16.8	29.6	41.5	38.2	42.7	42.2	29.2
Village DEDs	29.8	28.8	26.5	26.5	24.5	27.4	23.3	22.6	19.8
DEDs excluding towns and villages	57.8	44.4	56.7	43.9	34.0	34.4	34.0	35.2	49.0
Total number of workers	3125	7279	3727	2054	686	2420	1114	2192	1659

Figure 3: DEDs classified by Component 1, 1981



improve Co. Donegal's overall position and diminishes Co. Leitrim's level of well-being to some extent.

Table 5: **No. of DEDs in each Factor Score Category (1971 and 1981)**

	Factor scores based on 12 variables					
County	-0.1 and over		0.0-0.99		1.00 and over	
	1971	1981	1971	1981	1971	1981
Leitrim	63	59	12	18	3	1
Sligo	59	57	12	15	11	10
Donegal	47	48	65	64	37	37

	Factor scores based on 9 variables					
	1971	1981	1971	1981	1971	1981
Leitrim	63	64	12	10	3	4
Sligo	57	57	11	13	14	12
Donegal	53	41	61	70	35	38

The Role of Non-Agricultural Employment

The 1965 Government Statement on Regional Policy had as an objective 'to encourage the development of small towns and rural areas, so that people seeking work will still be able to find it at convenient locations.' Table 6 shows the number of grant-aided jobs in 1973 and 1980, which were supported by the two industrial development agencies in the region. By comparing the job totals in 1980 with the 1981 population

Table 6: **Number of Grant-aided Jobs in the Northwest Region (1973 and 1980)**

	1973			**1980**		
County	M	F	Total	M	F	Total
Leitrim	556	199	755	963	457	1420
Sligo	1907	593	2500	2281	1474	3755
Donegal	2598	2753	5371	3969	3134	7103

of Co. Donegal (125,112) and counties Sligo and Leitrim (83,083), Co. Donegal, with only 0.05 jobs per person, is in second place to Sligo/Leitrim's 0.06 jobs per person. While bearing in mind the differences in area and population size between the three counties, it should be noted that Co. Donegal has 16 centres with 100 or more jobs compared with 7 for counties Sligo and Leitrim. In addition to its larger number of centres, Co. Donegal also had a good level of dispersal of jobs between centres. In 1973, only one centre in the county, Letterkenny, had more than 10% of grant-aided jobs. By 1980, Letterkenny's proportion had grown to 17% and two additional centres, Bunbeg and Buncrana, also had more than 10% of Co. Donegal's job total.

In Co. Leitrim, concentration of the small number of grant-aided jobs in 1973 was evident, with Carrick-on-Shannon having 30.2% and Ballinamore 25%. Three other centres had about 10% of the job total. Concentration, however, was even more pronounced in Co. Sligo, with Sligo Municipal Borough having 58.5% of jobs in 1973 and 74.4% in 1980. Tobercurry and Collooney were the only two other important job centres in the county in 1973, with about 17% of the total in each centre. By 1980, however, their position had been greatly eroded, with Collooney having only 5.3% of the total and Tobercurry 12.5%.

^ While the main focus in job promotion by the IDA and Udaras na Gaeltachta has been in the manufacturing sector, the growth in public service employment in the region during the 1970s was not inconsiderable, as is clear from Table 7. Increased participation by females in the workforce during

Table 7: **Percentage Change in the Number of Public Servants (1971-1981)***

County	M %	F %
Leitrim	22.8 (120)	40.2 (216)
Sligo	58.4 (609)	84.4 (983)
Donegal	52.4 (1112)	61.0 (1095)

*The Census Statistics Office's industrial categories 'Public Administration' and 'Professional' are used here as a proxy for 'Public Servants'.

the decade coincided with the expansion in the public service. This was particularly evident in the case of Co. Sligo, where Sligo Municipal Borough acts as a regional centre for such activities as health, education, industrial training and agricultural administration.

Residential Patterns of Non-Farm Workers

It is possible to examine the degree of rural population participation in the non-farm labour market by using the census data based on place of residence. Since much of this employment is town-centred, the potential for participation is related to the degree of dispersion of such employment and the mobility of the rural workforce.

Table 8 shows the changing distribution of male and female non-farm workers in three categories of DEDs. Apart from a very modest increase in the number of female non-farm workers, the urban DEDs (with towns of 1,000+ persons) in all three counties maintained their position throughout the decade. It is clear, too, that Co. Sligo continued to have the most urbanised non-farm workforce, both for males and females. The village DEDs showed an overall decline, but this can be partly explained by the fact that some villages had grown into towns of 1,000 or more persons by the end of the decade. The net result, therefore, was a reasonable improvement in the proportion of non-agricultural workers residing in the most rural DEDs.

By examining the non-farm male workforce by sector (Table 9), it is clear that the level of residential concentration varied considerably. While Co. Sligo had a very urbanised workforce, the general pattern in each county was for Production and Labouring workers to be more numerous in rural areas, and for Transport, Clerical, Commerce, Service and Professional workers to be the most urban-centred categories. This suggests the existence of two distinct workforces — a rural-based agricultural population involved to some extent in Production and Labouring, and a town-based non-agricultural workforce, partly made up of in-migrants to the region and mainly involved in public service employment.

Table 8: **Percentage Distribution of Male and Female Non-Farm Workers by County (1971 and 1981)**

	Co. Leitrim				Co. Sligo				Co. Donegal			
	1971		1981		1971		1981		1971		1981	
	M	F	M	F	M	F	M	F	M	F	M	F
DEDs with towns 1,000+/Pt	9.47	14.47	11.70	14.90	43.15	45.67	42.90	50.20	27.35	28.70	27.50	32.60
Village DEDs	37.24	39.04	28.20	31.30	20.69	22.10	14.30	13.00	31.59	30.70	26.70	25.30
DEDs excluding towns and villages	53.29	46.49	60.10	53.80	36.16	32.23	42.80	36.80	41.06	40.90	45.80	42.10
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00