As is well recognised, low money income is only one aspect of poverty, rural (particularly farm) incomes vary widely from year to year, and most people do all they legally can to reduce the amount of their taxable income. Nevertheless, the picture revealed by taxation returns should give a reasonable first approximation to the *relative* distribution of poverty across the State. For each postcode area, the total taxable income is divided by the number of people submitting a return, irrespective of whether all of these earned sufficient to pay tax.

Comparing metropolitan with rural postcodes, there is no doubt about the relative disadvantage suffered by rural areas generally (Figure 6.12). Within the rural areas a clear zonal pattern appears, with a concentration of the *highest* average incomes in a ring of rural areas surrounding the metropolis, and outliers in postcode areas centred on the larger country towns, notably Port Lincoln, Port Pirie, Millicent and Mount Gambier. A remarkable feature is the high average incomes being earned by the sparse population in the northwest of the State. Here the presence of many low income earners (including many unemployed, aboriginal people, and others) is more than offset by high wages earned by mining, steel, public infrastructure and defence workers at places such as Roxby Downs, Woomera, Coober Pedy, etc. as well as Whyalla and Port Augusta.

As to the distribution of the *lowest* average incomes, by 1991 the Murray Mallee had clearly overtaken the Eyre Peninsula as the State's principal low income area. Postcode areas averaging below \$11,000 taxable income are heavily concentrated in this region, with other pockets in the mid-North and along the northern fringe of Eyre Peninsula. Apart from these extremely low averages, practically the whole of the wheat-sheep belt except parts of the northern Yorke Peninsula had average taxable incomes below \$14,000. A similar map constructed for the following tax year (not included) showed improved average incomes were in substantial parts of Yorke and Eyre Peninsulas and the Mid-North. Not so in the Murray Mallee. In 1991/2, in fact, average incomes below \$11,000 were practically confined to the Murray Mallee, establishing that region as the core area of low average incomes.

### **Demographic impacts**

The intensity of the rural recession described above was such that substantial demographic impacts on rural society were inevitable. Several studies of South Australian and national migration patterns exist for the 1981-1986 period (Bell, 1992; Hugo, 1989; Hugo and Smailes 1992) and for the 1986-91 period (Hugo, 1994; McKenzie 1994; Maher and Stimson, 1994). These studies are not rehearsed here. Instead, drawing on a fuller previous study (Smailes, 1996) I concentrate on the changes most likely to influence the spatial patterns of social interaction (population numbers, age composition, nature of population change, and degree of settlement nucleation) for the 1981-1991 period. This is the intercensal period which best matches the timing of the rural crisis, though it does not capture the full impact of lagged demographic adjustment to it. The analysis uses LGA (Local Government Area) data, but corporate towns are combined with their surrounding rural LGA, treating each town and surrounding area as a single unit.

Fig. 6.13 (A) Percentage change in the total population, 1981-1991: Gains (B) Percentage change in the total population, 1981-1991: Losses



Source: Australian Bureau of statistics, 1981 and 1991

### **Change in population numbers**

The extent of change in absolute population numbers over the decade appears on Figure 6.13. For clarity, gains and losses are shown separately. The regional patterns show a striking correspondence to the three phases in the initial white occupation of the study area (Figure 2.2): the areas that experienced gains are almost all in the old core of the state occupied in the first three decades, including its outliers, while the areas of heaviest losses (15-24% of the 1981 population) were in the most recently settled areas (Eyre Peninsula, Murray Mallee and most of Kangaroo Island). The intermediate zone had more varied outcomes, the drier eastern flanks of the ranges from Burra to Orroroo faring worst.

The exception to this neat zonation of population change is the Riverland, or Upper Murray, where numbers grew over the decade despite the severe impact of the collapse of citrus prices, which was at its height at the time of the 1991 Census. Overall, the State's spatial pattern of population growth is consistent with a locally expansive urban field with population growth reaching well beyond the normal commuting pattern into high-amenity, high-density, well-watered or environmentally attractive areas, including tourist and retirement centres like Robe, Wallaroo/Moonta and Port Broughton. Notably, the bulk of the population growth occurred within a two hours non-rush hour drive to central Adelaide.

## Changes in age composition

To appreciate the devastating demographic effect of the rural crisis, however, we must turn from the total population picture to population composition (Figures 6.14 - 6.15). The young adult population group in the 20-35 year age brackets is clearly vital in terms of maintaining the birth-rate and the school and pre-school age groups, as well as providing for the necessary generation shift in family farms and rural businesses, providing new ideas, maintaining sporting teams, providing a pool of marriage partners, and much more. Figure 6.14 is remarkable not only in demonstrating the extent of loss of this age group (from a quarter to over a third of this group lost over the ten year period in many rural districts) but also the spatial concentration of the areas experiencing its growth and decline. The core zone of growth was so sharply demarcated that an arc of a circle with a 100Km. radius from the Adelaide G.P.O. practically covers it, with only three small outliers.

A totally different picture emerges from Figure 6.15, which shows the change in the retirement age groups 60-75. Instead of general losses throughout the rural areas, we have practically universal *increases* in these age groups. The absolute numbers involved here are smaller than for the young adults, so that large percentage changes are more readily achieved. Nevertheless, the map is so spatially consistent that a real tendency may confidently be identified. A number of points arise from this Figure.



Fig. 6.14 Percentage change in the population aged 20-34, 1981-1991: (A) Gains, and (B) Losses

Source: Australian Bureau of Statistics, 1981 and 1991 Censuses



Fig. 6.15 Percentage change in the population aged 60-74, 1981-1991: (A) Gains , and (B) Losses.

Source: Australian Bureau of Statistics: 1981 and 1991 Censuses

- There are very few rural areas actually losing numbers of people in the retirement age groups. Rural areas have in general been able to retain most of their retirees, in part because of the high disparity in house prices between the country and the city, in part because of natural reluctance to lose social networks, and because many country towns have built retirement homes, hostels and units for their senior citizens, while other rural districts have coastal or riparian holiday home colonies attractive to retirees from elsewhere.
- The majority of the increase comes from the ageing *in situ* of each district's established population. Other contributing factors include continued retirement migration, plus recall of urban retirees to run farms, while the owners travel away in search of off-farm income.
- In the metropolitan area there is a substantial group of L.G.A.s with losses in the retirement age groups, and these locations are likely to be source regions for urban-to-rural retirement migration. Inspection of Figures 6.14 and 6.15 shows that the peri-urban population growth zone is attracting *both* young (20-34 age group) *and* retirement migration streams.
- Even in the areas showing up as relatively stable population numbers in Figure 6.15, it appears that population composition is likely to be altering strongly, for here a decline in the "Young married" group is being compensated by rises in the retirement age groups.

## Impact on farm households

The situation revealed by the above investigation of age structure changes refers to the whole rural population, including those resident both on farms and scattered houses, and in the country towns too. To understand what these changes mean to the farm population and workforce in particular, a micro-scale example is needed. Figure 6.16 illustrates the 1992 population structure in 37 randomly selected farm households surveyed in the District Council of Cleve (Smailes, 1993, pp. 30-32). Unlike a normal age-sex pyramid, this diagram shows the age structure and sex of the current members of the 37 households on the right, and that of the *absent* family members who have now moved away on the left. The farm workforce had by this time been cut to the bone, leaving an average of just over two full-time workers per farm (including both males and females), almost all of these being family members. These 37 farms averaged 1,742 Ha., or over 3,800 acres in size, and were clearly understaffed; the families could only manage the most essential tasks by what amounts to selfexploitation in terms of overwork. As several farmers pointed out, many simply could not manage more land with their current labour resources, old machinery and inability/unwillingness to raise more capital by further borrowing. People in Cleve often spoke of a "lost generation" of young people forced off the farms not because of any wish to leave or any lack of need for their labour, but because the farm could not supply a living for two families or a decent wage for the son.

Comparing Figure 6.16 with the general picture from Figure 6.14, it is clear that the heavy loss of people in the 20-35 age groups had severely affected the farms: there were very few in these age brackets left in the surveyed households. Naturally, the out-migration of these age groups was not entirely due to rural crisis conditions, for even in good times a proportion of farm children will leave to take up non-farm jobs. Also, as children leave home and marry, some will remain in the district, or even in a second house on the home farm, starting new households. Such cases are shown by

cross-hatching on the left-hand bars of Figure 6.16. The remainder constitutes the loss to the district.

## Fig. 6.16 Age and sex structure of resident members and non-resident former members of 37 randomly sampled farm households, District Council of Cleve, Eyre Peninsula, 1992



Source: Smailes 1993, 30. Data from author's field surveys.

The survey investigations (Smailes, 1993) showed that up to 1987, the adverse conditions had increased the normal rate of loss of young people by between 25% and 50%. By 1992 the excess rate of loss had increased to between 50% and 100% more than it "ought" to be. More than half of the children leaving over the preceding five years had done so due to the rural crisis.

## A scale of demographic change

Demographic change has a subtle but considerable effect on community morale. A certain sense of security, achievement and optimism attaches to population growth, while decline engenders unease and stigma, and loss of confidence in the future. This

may be partly because total population change is in fact shorthand for a whole series of interconnected changes to different elements of the population structure, which alters in a highly predictable way – at least in this study area. To illustrate this, in the previously cited study of 85 LGAs (Smailes 1996) six important indicators of demographic growth were selected as dichotomous variables, or attributes, which may be either present (1) or absent (0) according to a predetermined cut-off point. For convenience, any positive increase above zero was taken as 'growth'. Attributes included were as follows (the number of LGAs with a positive score on that attribute is given in brackets). Thus all but two of the 85 LGAs had a positive natural increase, but only 28 had increases in young adults.

# Table 6.8 Indicators of demographic growth, 1981-91, used in Guttman scalogram, by number of cases experiencing growth: S.A. local government areas

Natural increase, as an indication of the local population's capacity to	
reproduce	(83)
Age-groups 60-74, the active retirement age groups (the 'old old' with a	
greater incidence of mobility problems are deliberately not included)	(76)
Total occupied dwellings, as an indicator of the number of households,	
which may continue to increase with total population static or declining	(73)
Total population, an important general psychological indicator of growth,	
and often used as a rule of thumb in calculating Local and state government	
allocations of funding	(49)
Net migration, as an indicator of the capacity of the community to attract	
new recruits from outside	(28)
Age-groups 20-35, the young adult age groups whose decisions to stay or	
leave also affect the school and pre-school age groups, and which are vital	
for the social and economic health of many aspects of the community	(28)

These results were so consistent that they could be combined into a single indicator of complex demographic change, using the unidimensional Guttman scaling technique (McIver and Carmine, 1981). A data file is then arranged with the above six attributes as columns from left to right, in the above sequence, and a row for each of the 85 spatial units. Each unit is given a score from 0 to 6 according to the number of indicators on which it has registered growth. The file is then sorted in descending order according to the score. In a perfect scale, the scores should correspond to a symmetrical triangle (Table 6.9). Any departures from this symmetry become scaling errors. In the present case, these are remarkably few: only 11 of the 85 spatial units deviate, each having no more than two 'incorrect' columns. The appropriate statistical tests confirm that the six indicators together represent a single valid composite index of growth/stagnation.<sup>1</sup> This is a significant finding, implying that demographic change over the period can economically and accurately described along a single dimension of change – not exactly, but with a substantial degree of predictability. Thus for example, if we know that a community's total population has increased, we can predict with considerable confidence that it will also have a positive natural increase, growth in the retirement age groups, and an increase in the number of

<sup>&</sup>lt;sup>1</sup> A Coefficient of Reproducibility of .96 was obtained using the Goodenough/Edwards method of error counting, while Menzel's Coefficient of Scaleability was .81. These results comfortably exceed the suggested critical values of .9 and .6 respectively.

households. This is so in all but three cases. On the other hand, if we know that a community's total population has fallen, there is a very high chance that it has also suffered negative net migration and losses in the young adult age groups. This is so in all but two cases.

# Table 6.9S.A. local government areas: demographic growth 1981-1991 byGuttman scalogram growth types 0-6, and number of LGAs in each type

Score	Corresponds to 1981-1991 growth in:	No.
		of
		cases
6	Natural increase, ages 60-74, households, total population, net migration, ages 20-34	22
5	Natural increase, ages 60-74, households, total population, net migration,	7
4	Natural increase, ages 60-74, households, total population	21
3	Natural increase, ages 60-74, households	19
2	Natural increase, ages 60-74	13
1	Natural increase	3
0	No growth in any indicator	0
	Total	85

Source: Smailes 1996, x





Source: Australian Bureau of Statistics: Censuses 1981 and 1991

The growth types again conform to a concentric demographic structure, with a solid ring of type 6 surrounding the metropolitan area. Confirming the strong relationship between positive net migration and growth of the young adult cohorts is the fact that there are only seven cases of type 5, where positive net migration typically occurs *without* growth in the 20-34 age groups.

The 21 cases of type 4 have all had a modest increase of total population, achieved by natural increase plus ageing in situ, and most probably a large age difference between the in-and out-migration streams. They have suffered negative net migration, losses of young adults, and sharp increases (averaging 24%) in the retirement age groups. Type 4 cases are mostly outside the main growth ring, in relatively high-amenity areas outside easy range from Adelaide. They include the intensive farming/viticulture areas of the Riverland and Clare Valley; major service centres not dependent on heavy industry (Mount Gambier and Port Lincoln); and scattered resort, tourist and retirement destinations on the coast or the Flinders Ranges.

Here, we concentrate on the demographic types most impacted by the rural crisis – types 3, 2 and 1 that have suffered loss in total population (Figure 6.17), with an indication of the cases of scaling 'errors'<sup>2</sup>. Their spatial distribution coincides closely with the distribution of farm and general poverty shown on Figures 6.11 and 6.12. The nineteen L.G.A.s in type 3, which includes the three Iron Triangle cities of Port Pirie, Whyalla and Port Augusta, had similar ageing and net migration characteristics to those of Type 4 just described; but in this case they had been unable to maintain total population increase, despite radical increases in the 60-74 age groups. In Type 2 household numbers had also fallen, while in Type 1 not even the retirement groups had increased. Spatially, types 2 and 1 were all located in either the Eyre Peninsula, the Murray Mallee or the dry eastern flanks of the South Flinders Ranges. They are highly rural wheat/sheep and marginal cropping/grazing communities dominantly in the most recently settled zone of the State, and have borne the brunt of the rural recession.

### Local concentration of population

From the Cleve case study (Figure 6.16) it may be suspected that the rural crisis would initially impact the dispersed population more than that of the country towns, leading to an increase in local concentration of people. If that is the case, then the towns themselves could expect a lagged flow-on effect as service employment falls and ageing gradually takes its toll. Investigation of trends in the town and rural components of the 85 spatial units separately, using the Guttman scaling method, showed that in communities where the dispersed population growth was lowest or absent, the central town populations tended to occupy relatively higher growth categories. On the other hand in areas of maximum rural growth, such as the peri-urban hobby farming and rural retreating areas, the dispersed population growth exceeded that of the local towns.

<sup>&</sup>lt;sup>2</sup> Two of these scaling errors are Port Broughton and Victor Harbor, the only two LGAs experiencing natural decrease over the period – offset by heavy retirement-oriented in-migration.

## The rural crisis and the restructuring of country retailing and service provision

The rural crisis took place in a period when rural service provision – the economic mainstay of many country towns - was in any case undergoing substantial structural and locational change throughout the economy. The effects of these changes and their impact on rural businesses were undoubtedly hastened and exacerbated by the widespread poverty and demographic decline described above, though it would be impossible to quantify the separate impact of the rural recession from general economic change.

One of the major background changes that continued through the recession was the virtual shrinkage of distance through increasing accessibility of major cities. To illustrate the magnitude of this change the 1967 survey referred to above provides a baseline in the form of an accessibility surface for Adelaide<sup>3</sup>. The 1992/93 postal survey included questions on driving times to major centres, and Figures 6.18 and 6.19 show the *increase* in the accessibility of Adelaide between 1967/68 and 1992/93, in absolute and percentage terms respectively. (Kangaroo Island is omitted because in 1968 there was no rapid car ferry to the mainland). In a State as centralised as South Australia, with its strongly radial transport network, the prime accessibility surface is that linking the scattered rural communities with Adelaide. Changes in this surface also provide an indication of general changes in mobility.

It should be noted that the driving times to Adelaide reported by rural people are generally faster than the driving times published by the motoring organisations, for the benefit of tourists and using official speed limits. A trip to Adelaide is generally a direct, purposeful and limited-stop undertaking done in the most favourable time for driving, and speed is not seen as one of the seven deadly sins, but as a matter of what the car will safely do, tempered by common sense.

The reduced driving times shown in Figure 6.18 have occurred while most (though not all) rural households had access to at least one car. As would be expected, the reduction was greatest in the peripheral areas. At the outer limits of the settled areas, from Ceduna westwards, three hours or more had been cut from the average reported driving time between the two dates. This represents a very significant shrinkage of the distance barrier. However, in the central, early-settled core area of the state, from about Victor Harbour to Port Germein near the head of the Spencer Gulf, very little saving of driving time was apparent. Within about 70 Km. from central Adelaide no saving at all was reported, and indeed it appears likely that the increased density of traffic within this area may have slowed the average rate of movement, wherever this had not been countered by road improvements.

<sup>&</sup>lt;sup>3</sup> Control points for constructing the isopleths in each survey consisted of a lattice of points spaced 30 terrestrial minutes apart. The technique employed a moving grid window covering 1 degree (Latitude) by 1 degree (Longitude), moving the window half a degree each time and counting the average driving time for respondents within each location of the window. There is a strong relationship between mean driving time from the city and the standard deviation of responses within the grid window locations, which should be borne in mind when interpreting Fig. 6.6.



Fig. 6.18 Reduction in average reported driving time to Adelaide, 1968 to 1993 (hours).

Fig. 6.19 Reduction in average reported driving time to Adelaide, 1968-1993 (per cent)



Source: author's postal surveys, 1967/8 and 1992/3

Figure 6.19 shows the *percentage* reduction in reported travel time over the period. The topography of these two Figures is not necessarily related, for a fairly small reduction in travel time at a short distance from Adelaide may still produce a substantial percentage reduction, while on the remote periphery a much larger absolute reduction in travel time is needed to produce the same percentage change. The results from Figure 6.19 do show a general relationship between percentage reduction in travel time and distance from Adelaide, but with several unforseen variations and changes. The maximum reduction in reported travel time was about 30%, which occurred in the Upper Murray and Upper Southeast rather than the far West Coast. Even in the late 1960s travel speeds on the Eyre Peninsula were already fairly fast, due to relatively light traffic, straight roads and low population densities. Nevertheless the 20-25% reduction in reported travel times over much of western Eyre Peninsula represent a significant relative as well as absolute change in the region's remoteness. The pattern of percentage changes in the south-eastern quadrant of the State was much more complex. Improvements of 20, 25 and even 30 per cent along the Duke's Highway (main Adelaide-Melbourne road) were reported at relatively short distances from Adelaide. Most of the eastern Murray Mallee and Upper Murray experienced at least 20 percent reduction, including a small patch of formerly ill serviced territory east of the Adelaide Hills escarpment.

Although Adelaide is the reference point for the above calculations, they express a general reduction in distance friction that benefited other large competing centres too. In fact, while these changes were taking place, the grip of the Adelaide CBD on South Australia's retail and service spending was loosening, particularly in the face of major expansion of the metropolitan regional shopping centres (Table 6.10).

Location	1968/9		1973/4		1985/6		1991/2	
	\$000	%	\$000	%	\$000	%	\$000	%
City of Adelaide	263,639	26.5	389,391	23.5	1,125,677	15.4	1,120,552	15.3
Rest of Metro area	473,386	47.7	876,635	53.0	4,631,716	63.3	4,684,135	63.8
Total, Adelaide Statistical Divn.	737,025	74.2	1,266,026	76.5	5,757,393	78.7	5,804,687	79.1
Rest of the State	256,218	25.8	388,380	23.5	1,559,923	21.3	1,537,545	20.9
TOTAL STATE	993,243	100.0	1,654,406	100.0	7,317,316	100.0	7,342,232	100.0

Table 6.10 Proportions of retail and selected service turnovers by location type,1968/69 to 1991/92

Source: Australian Bureau of Statistics: Censuses of Retailing and Selected Services, 1968/69, 1972/73, 1985/86 and 1991/92.

By 1992 the CBD (which accounts for the great majority of the City of Adelaide turnover) was still by far the greatest single retail complex in the State, but had steadily lost ground in relation to the suburban shopping centres. Whereas in 1968/69 the C.B.D. and the country areas (i.e. the State exclusive of the Adelaide Statistical

Division) each had about a quarter of the total retail turnover, by 1991/2 both had suffered substantial relative losses, while the proportion of the turnover spent in suburban and satellite locations within the Adelaide S.D. rose from less than half to almost two thirds. The change in the balance occurred particularly rapidly between 1973/4 and 1985/6.

Some of this rise in suburban retailing simply reflects changes in metropolitan population distribution. However the burgeoning growth of large outer suburban shopping complexes, whose location places them as a powerful 'intervening opportunity' for rural shopping trips to the city has provided a new element of competition for retailers in country locations. The growth of major suburban centres was accompanied by a remarkable fading of the trade shadow cast over rural South Australia by the Adelaide CBD. In contrast to its dominant position in Figure 6.4, by 1992/3 only Kangaroo Island, the far south of Yorke Peninsula and the inland pastoral zone reported incurring over 50% of their spending in central Adelaide (Smailes 1996, 126). In 1968/9, I was able to show that the suburban shopping centres, then in the early stages of their development, had a negligible impact on the shopping habits of country people. By 1993, however, the situation was very different. Results from the two more recent postal surveys (details presented in Chapter 7) show the spatial extent to which the main satellite centres of Gawler, Elizabeth, Salisbury, Mount Barker, Tea-Tree Plaza (Modbury), Marion, and Noarlunga Centre had spread their influence by 1982/3 and 1992/3 respectively. The trade from rural areas captured by these centres has clearly accounted for a substantial part of the observed shrinkage of the City of Adelaide's trade shadow noted above.

The patterns of gain and loss of share of the State's retail trade, for 83 individual country towns and major outer suburban centres, are fully discussed in Smailes (1996). To relate these retail/service outcomes to the accessibility, income and demographic changes outlined above, two significant findings will suffice.

First, Figure 6.20 reveals a pattern of change in the State's retailing and selected service employment that strongly reflects the demographic changes described earlier, and emphasises the increasing differentiation between core and periphery. For each town, the map shows the 1991/92 percentage share of the total State retail *employment* as a ratio of the 1968/69 share; the results for *turnover* (not presented here) are spatially almost identical. The picture is stark and simple. Towns with relative growth in their share of the State's retail turnover occupy a core area from the Barossa Valley to the coastal resorts of Victor Harbor and adjacent Port Elliot and Goolwa. All these were within 90 minutes non-rush hour driving time from central Adelaide. Elsewhere, a number of key regional capitals and other strategically located towns had held their own, or almost so: Ceduna, Port Lincoln, Port Augusta, Kadina, Clare, Berri and Mount Gambier. The two major industrial cities of Whyalla and Port Pirie suffered losses commensurate with their loss of manufacturing jobs. With a very few inland exceptions, the other country towns that maintained their share of retail employment were resort, tourism or retirement venues, mostly on the coast.



# Fig. 6.20 Ratio of share of State employment in retailing 1991/92 to share in 1968/69, by town.

Source: Smailes (1996, 132). Based on Australian Bureau of Statistics, Census of Retailing in South Australia 1991-92; Annual Report of Commissioner of Taxation, 1991-92 tax year.

Second, for 1991/92 it was possible to relate the retail turnover of a particular town to the taxable income earned in its surrounding postcode area. The multiplicity of demands on household income make it highly unlikely that retail turnovers in country towns will even approach 100% of income earned in their postcode. In fact apart from the City of Adelaide, only five major suburban regional and satellite centres have turnovers exceeding the total income being earned in their postcode areas. Turnover as a percent of local income earned is obviously affected also by the varying sizes and affluence of postcode areas, and can only be a fairly crude indicator. Nevertheless Figure 6.21 gives a useful impression of the *relative* performance of country towns at the height of the rural crisis.

The dominance of the CBD and metropolitan satellites is evident. Outside the metropolitan area though, there is no clear relationship between size of town and successful exploitation of the local market potential. Towns with turnover exceeding 75% of local taxable income include some quite small places, such as Yorketown on Yorke Peninsula and Berri, centrally located in the irrigation areas of the Riverland region, as well as the more dominant local centres of Kadina, Mount Barker and

Victor Harbor, while some of the largest country towns - notably Whyalla, Port Pirie, Port Lincoln and Mount Gambier - fail to reach the 75% level.

# Fig. 6.21 Retail turnover as a percentage of local taxable income, by town and postcode area, 1991/92.



Source: Smailes (1996, 130). Based on Australian Bureau of Statistics, Census of Retailing in South Australia 1991-92; Annual Report of Commissioner of Taxation, 1991-92 tax year.

Figure. 6.21 also shows the tendency for a small number of strategically located and evenly-spaced towns to out-compete their neighbours. Two of these relatively more successful small communities are Cleve and Wudinna on Eyre Peninsula, which despite their inland location are well placed to share dominance of the Peninsula with the larger towns at the three corners of the triangle - Port Augusta, Port Lincoln, and Ceduna. In the Mallee and mid-North wheat belt regions too, the most successful towns are widely scattered. The influence of tourism in boosting turnovers is apparent in a number of coastal centres, though this is more limited than might have been expected. Kingscote on Kangaroo Island is a special case where the heavy loss of trade to Adelaide for high order items is compensated by its tourism function and insulation from competition for low-order goods.

### Summary of chapter findings

In this chapter I have argued that the effects of the rural crisis were magnified by its timing in a situation where the uneasy spatial equilibrium between the three main layers in South Australia's central place hierarchy – the country towns, the regional capitals and their outer suburban metropolitan equivalents, and the Adelaide CBD –

was already undergoing change. This equilibrium, I suggest, began to be disturbed in about the mid 1950s and represented a readjustment to rapidly increasing mobility of the rural population, increasing speed and ease of access to larger centres, and rapid restructuring of the retailing industry toward large scale high volume, low unit profit outlets. The competitive power of the lower-order service businesses that form the core of country town economies was progressively eroded. From the late 1950s the regional capitals began to part company from the standard country towns, while from the mid 1970s rapid expansion of major outer suburban centres such as Noarlunga Centre, Elizabeth and Gawler began to partially replace the CBD's trade shadow over rural areas. By 1991/2, I have shown that the great majority of country centres outside the old core area of settlement had suffered a relative decline, including some of the major regional centres. Towns which by then were performing better than average were more widely and evenly spaced than before.

In this context we have seen how, after recovery from the 1982 drought, South Australia's rural crisis developed in two major stages. The first, from about 1985, was initially restricted to the western and north-western parts of the settled areas, particularly Eyre Peninsula. The second, involving almost all agricultural areas of the State, and induced by adverse economic trends and political decisions, set in from about 1989 and came to a head in 1990 with the collapse of commodity prices, followed by a complex of factors including peak interest rates, the U.S.-E.E.C. trade war, low commodity prices and the development of entrenched farm indebtedness. In 1992 climatic factors again contributed with crop damage from excessive summer rainfall, followed by a severe mouse plague in 1993, and a return to drought in 1994.

By the 1991 Census, the heavy concentration of farm poverty in much of the wheat/sheep belt, particularly in the Eyre Peninsula and Murray Mallee, has been demonstrated; for the 1990/91 and 1991/2 financial years income distribution for the whole rural population has been shown to follow a strongly concentric pattern, corresponding positively to rural population density within the settled areas. (In the remote outback pastoral/resource extraction zone, however, the sparse population returned high average incomes).

The demographic impacts of the crisis have also been shown to be strongly concentrically distributed, coinciding with the population density gradient in the settled areas. This has resulted in the reinforcement of an already established core-periphery contrast in the State's settled areas, with the core areas experiencing increase in both numbers of households, total population, the young adult age groups, and rural population density, while the periphery has suffered population decline and general loss of the young adult age groups, though increases in aged population and in numbers of occupied dwellings have been recorded in most of the peripheral areas.

The objective of Chapter 6 has been to highlight the most significant aspects of change in the ground rules and the socio-economic environment within which individual rural communities have to operate; the next chapter takes up the question of the impact of these changes on individual communities and on the social organisation of space.