

THE CLUSTER CONCEPT: A BLUNT SWORD IN THE QUEST
FOR ECONOMIC DEVELOPMENT

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ABSTRACT:

High cost, low productivity development strategies are a liability that Ireland can ill-afford. This paper examines the role of one such strategy, the I.D.A.'s Cluster Concept.

The paper undertakes a general evaluation of the effectiveness of the Cluster Concept as the I.D.A.'s primary strategy for industrial location and development. It argues that the Cluster Concept is a growth-orientated development strategy that has failed to cope with the problems posed by widespread economic recession. The Cluster Concept has failed to produce any long term economic growth and has become increasingly ineffective as a development strategy. This ineffectiveness has been exacerbated by I.D.A. mismanagement and national economic problems. The paper argues that present economic conditions dictate a serious re-evaluation of the Cluster Concept as the I.D.A.'s primary development strategy.

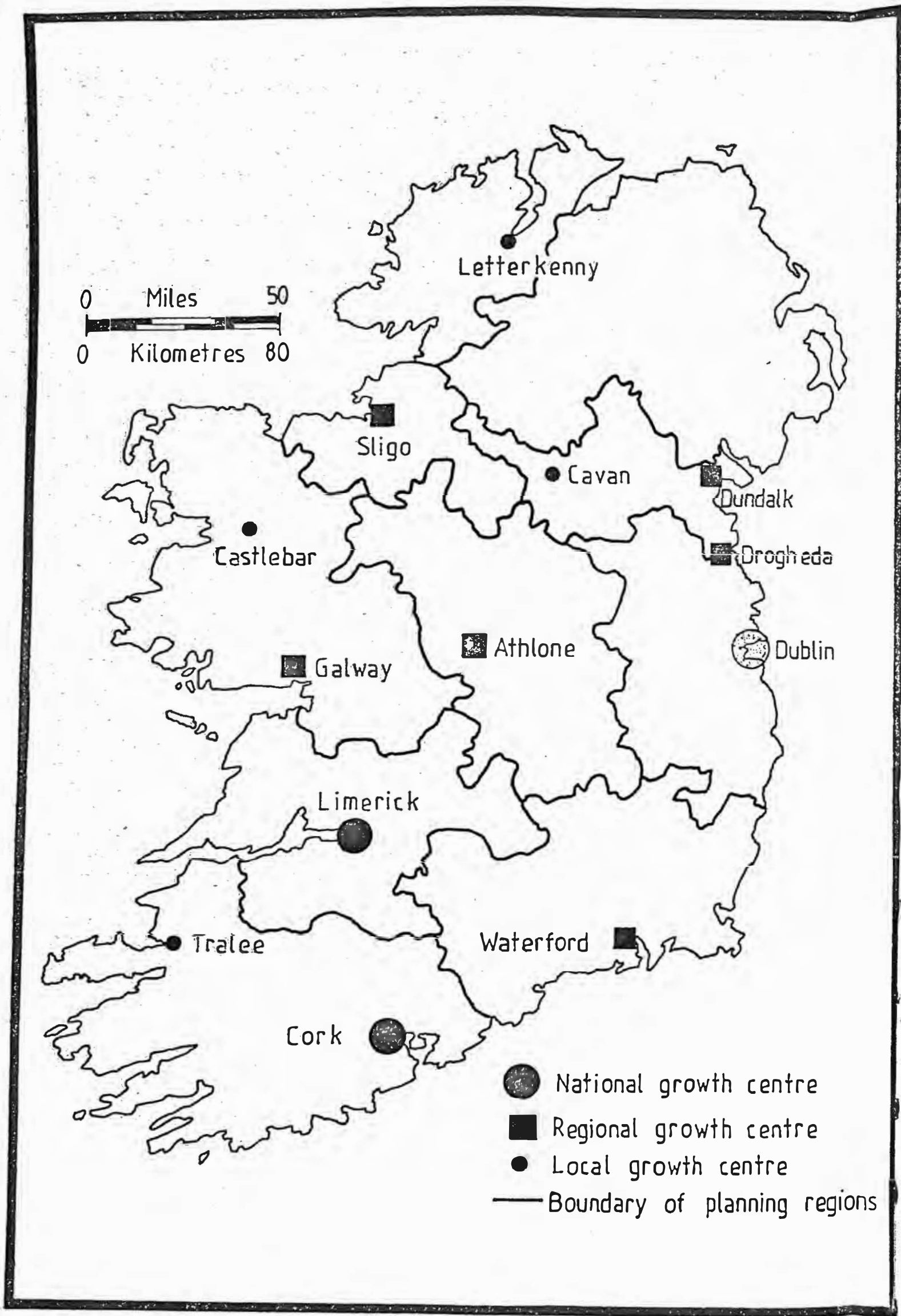
"Growth Centre Versus Dispersal"

In the late 1960's and 1970's Ireland was a battlefield for two diametrically opposed schools of industrial development strategy. The troops of the growth-centre school, led by Colin Buchanan and guided by his major 1968 report, were waging a fierce war with the largely homegrown advocates of a totally conflicting dispersal policy.

The major issue at the centre of this conflict of opinion was: Where should industry be located in order to guarantee Ireland's future economic prosperity? In 1969 the campaign to have a growth-centre strategy implemented in Ireland was formally proposed in the report of the British consultancy firm, Colin Buchanan and Partners, (Buchanan 1968). This report, which proposed that seventy-five per cent of new industrial employment should be concentrated in nine urban centres over a twenty year period, became the 'constitution' of the growth-centre advocates in Ireland. For these people the growth-centre strategy was the opiate that would ensure the country's place in the "El Dorado" of European Economic prosperity. Buchanan's strategy (Fig 1) was particularly attractive for several reasons. It was argued that

1. Owing to the various agglomeration economies that growth-centres produced, the growth-centre strategy tended to be a very efficient way of generating development.
2. The concentration of investment in specific growth-centres tended to cost less in terms of public expenditure than wholesale grants to large areas.
3. The 'Spread' and 'Multiplier' effects of the growth-centre helped solve the problems of depressing regions i.e. the regional demension.

BUCHANAN REPORT (BUCHANAN AND PARTNERS, 1969)



The growth-centre advocates suggested that concentration of industry had many advantages. It provided a nucleus for regional development and economies of scale. In addition they also argued that development in a limited number of centres would bring rural advantages with concentration facilitating the retention of recreational and agricultural open space. The growth-centre advocates pointed to France, Italy and Great Britain as examples of countries where strategy was proving to be a practical success. They firmly believed that the growth-centre strategy would be the most efficient and most modern method with which to promote national development.

The assertions of the growth-centre school however, were anathema to the growing number of people who favoured industrial dispersal as the rock upon which Ireland would build its future economic success. The advocates of this strategy attacked what they saw as the practical implications of Buchanan's proposals. They pointed out that existing 'ad hoc' socio-economic development policies had already concentrated investment in urban centres in Ireland, and in Dublin in particular. Significant sections of the country were characterised by small farms, an inadequate infrastructure, heavy out-migration and a twentieth century peasant economy. The advocates of dispersal stated that implementation of growth-centre proposals would destroy rural Ireland and aggravate existing core-periphery disparities.

By 1969 the two opposing schools of thought were preparing for the final debate that would ensure one or the other's success as Ireland's future industrial development strategy. In a determined effort to carry the day the advocates of the dispersal strategy enlisted the support of the Catholic Church. Fearful that implementation of the growth-centre strategy would erode its traditional power base in the rural regions the church actively campaigned against the Buchanan proposals. The growth-centre advocates countered these moves by stating that dispersal would involve a vast commitment in terms of the capital expenditure needed to finance a widespread allocation of capital grant assistance. In operation the dispersal strategy would have to entice industry to virgin sites and locations devoid of even the most rudimentary infrastructural provisions. It was also argued that the dispersal strategy would be incapable of producing agglomeration economies and the information-rich environment needed by small industries. The level of expenditure required to finance the strategy would also be immense and it would favour the foreign-owned company as opposed to the small indigenous industry.

In May 1969 in response to the opposition's repeated attacks, the supporters of the dispersal strategy played their ace card. The advocates of the dispersal strategy were acutely aware of the nuances of the Irish electoral politics and the fact that the growth-centre strategy would offer little to the most under-developed areas of the country in the midlands, West and North-west where the ruling political party derived a major portion of its electoral support (Breathnach 1982). The government was already faced with the compelling problem of legitimizing itself across the country and in areas with a strong rural electorate. As a result, it would not sanction the growth-centre strategy and face certain political suicide. The choice was obvious. In May 1969, the government

rejected the Buchanan report and closed forever the lid on the coffin of growth-centre policy in Ireland.

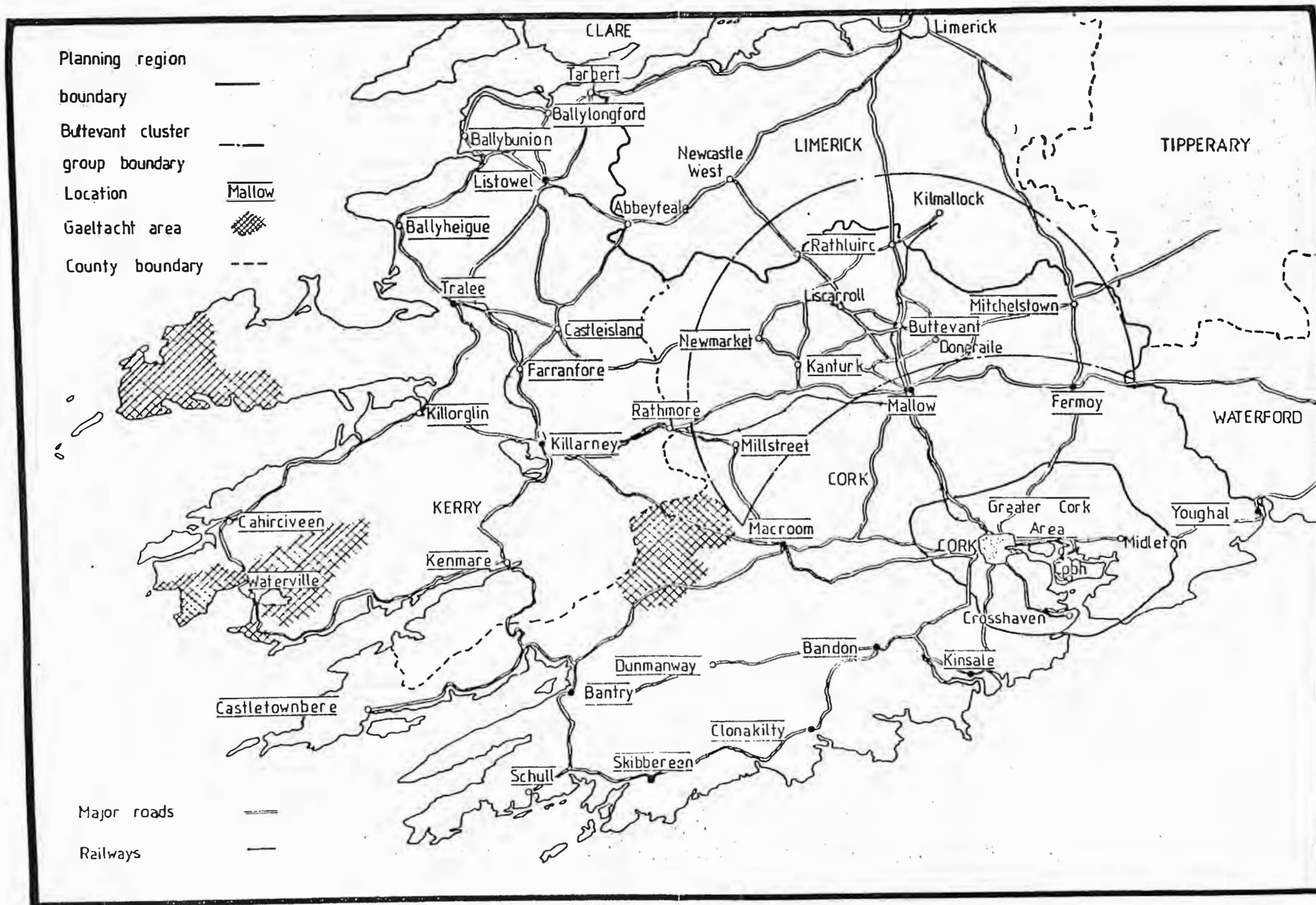
THE CLUSTER CONCEPT

The rejection of the growth centre proposals by the country's political leaders placed the Industrial Development Authority in a precarious position. The I.D.A. now found itself with the job of promoting industrial and economic development without a proper strategy or even a consistent theoretical framework to inform that strategy. In rejecting Buchanan the government had opted for the dispersal policy, the I.D.A. was now given the job of shaping the dispersal policy into a strategy that could be executed in practical terms. In 1973 the I.D.A. published its formal response to the government's demand for a development strategy based on the general requirements of the dispersal policy. It stated:

'In order to speed up their industrial development a clustering of geographically and functionally related towns may in a number of areas offer significant advantages as a basis for industrial promotion and development. By combining the industrial commercial and labour resources of the towns in question a better environment for the attraction of industry may be created'.....(I.D.A. 1973; 8)

In 1973, in the I.D.A's first five year development plan, the authority systematised the dispersal policy by dividing the country into forty-eight clusters of spatially proximate towns and their hinterlands. The Cluster Concept (Fig. 2) is the term ascribed to these town groupings. The Cluster Concept is the I.D.A's strategic embodiment of the dispersal policy. The I.D.A. designed each cluster to form a common labour-catchment area. The total national job creation target was spatially disaggregated and each cluster was assigned a target for industrial job creation during the period of a five year development plan. In each of the country's forty-eight clusters a number of towns were selected to act as growth points. These towns would act as the foci for industrial development within their respective clusters. The towns were selected on the basis of population, their functional and geographical proximity to each other and on the basis of their own existing local and regional importance. The cluster concept reflected the I.D.A's decision to encourage the development of certain specified towns as centres of growth which would provide industrial nuclei in areas largely dominated by agriculture. The I.D.A. stated that the cluster concept would prove advantageous in generating industrial development and would achieve a faster overall rate of growth than could be achieved by promoting centres independantly. The success of the cluster concept as a development strategy was directly linked with the successful attraction of industry to the growth towns. The development of an industrial base in the individual growth towns was intended to produce 'multiplier' and 'spread' effects that would benefit the remaining areas in the cluster. The I.D.A. hoped that the growth towns would become 'miniature cities' that would generate employment and transfer the rewards of their development throughout the cluster. Building upon the success of the various growth towns the I.D.A. believed that the cluster would reduce and

Fig.2 SOUTH WEST PLANNING REGION



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ultimately eliminate the existing high levels of population dislocation, rural decay and long distance journey to work patterns. The cluster concept would provide the worker with employment in his home community, in the growth towns and within the boundary of the cluster itself. According to the I.D.A. the cluster concept would actually 'bring work to the workers' (I.D.A. 1979 ; 45). To attract industrial investment to the clusters the I.D.A. developed a comprehensive programme of acquiring and preparing fully-serviced industrial sites throughout the country and in many cases ready built advanced factories were provided. A different industrial grant scheme was created to provide assistance to industrial projects, the percentage grant on offer varying with the I.D.A.'s locational priorities.

In the I.D.A.'s various industrial development plans the cluster concept became the functional spatial embodiment of the dispersal policy. As such the concept marked a significant dilution of the degree of concentration envisaged by Buchanan. Forty-eight clusters were designed by the I.D.A. and put into operation throughout the country. Seven clusters were established in the South-west regional planning and development area (Fig 3). The six spatially towns of Millstreet, Kanturk, Newmarket, Rathluirc, and Buttevant formed one of these clusters. These towns appointed to act as the cluster growth towns. Their development, it was stated, would be a priority for the I.D.A. and would ensure the successful socio-economic and industrial development of the cluster as a whole. The cluster concept is presently in operation as primary I.D.A. strategy for regional industrial location and development.

THE BUTTEVANT CLUSTER : AN EVALUATION

In 1972 the I.D.A. created seven clusters in the South-west regional planning and development area (Fig 3). A critical evaluation of one of these clusters, the Buttevant cluster, (Figs.2 & 3) reveals many of the strengths and weaknesses of the cluster concept as a strategy for industrial location and development. A necessary precondition to an effective evaluation of the Buttevant cluster is a consideration of the stated potential of the cluster itself.

The I.D.A. stated that the cluster would create an environment conducive to the attraction, and by extension the creation of industry. The I.D.A. stated that the foci of this proposed industrial development would be the specified growth towns in the cluster i.e. - Millstreet, Kanturk, Newmarket, Rathluirc, Mitchelstown and Buttevant. For the I.D.A. the creation of an industrial base in each of these growth towns was of central importance and would in turn produce 'multiplier' and 'spread' effects that would benefit the remainder of the cluster. Such things as functional specialisation in or between the individual growth towns was not envisaged. The key to the concept was the development of I.D.A. supported industry in the growth towns. The nature of the actual transfer of the socio-economic benefits of the development of the various growth towns to the remaining areas of the cluster was not clarified. The ultimate objective

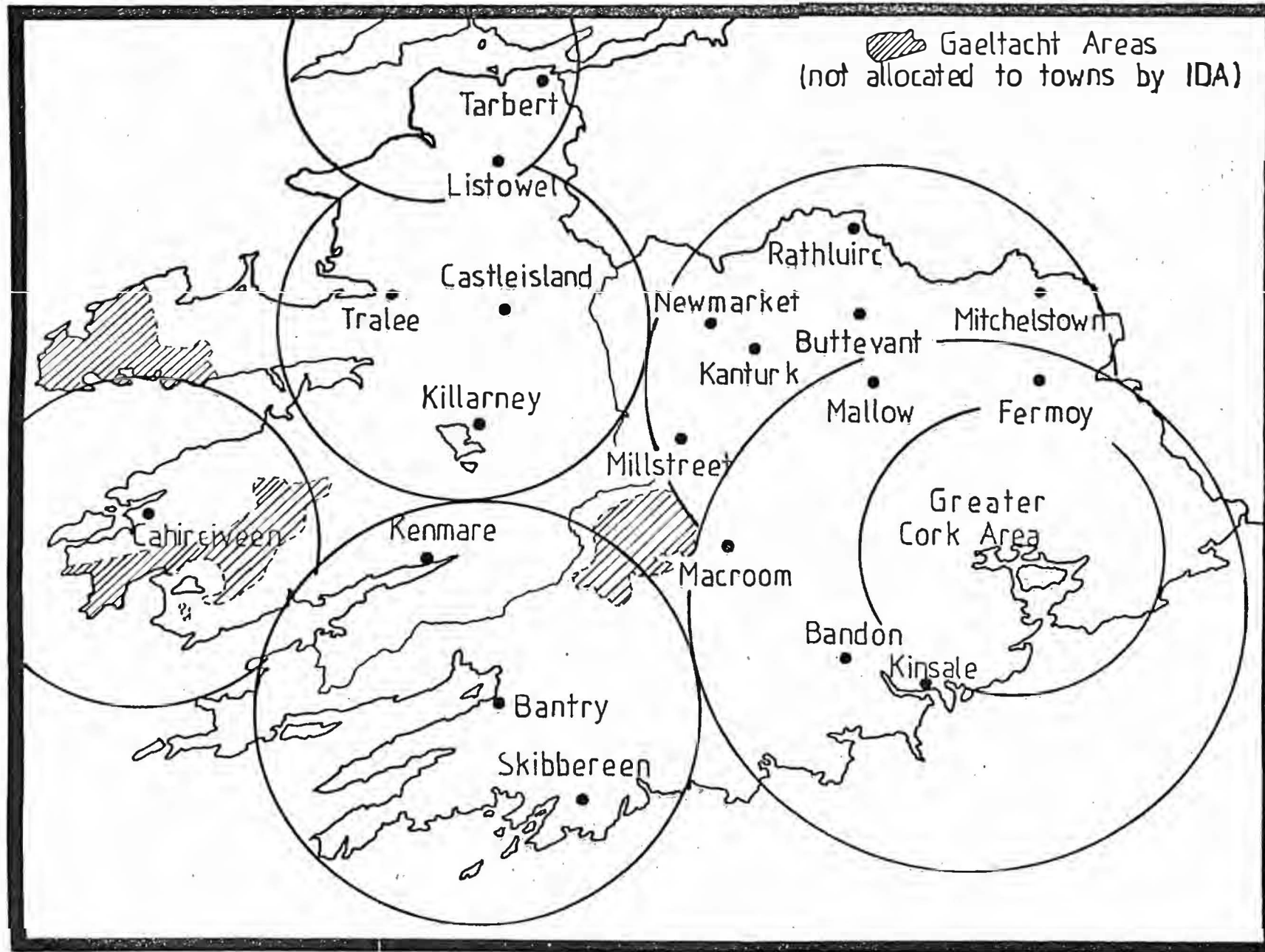


Fig.3 SOUTH-WEST REGION CLUSTER GROUPS

of the cluster was the creation of industrial employment and its associated benefits.

Bearing these facts in mind a critical evaluation of the Buttevant cluster reveals a number of negative patterns. These patterns have been established using official reports and supplementary questionnaire data. They would seem to suggest that there are justifiable grounds for questioning the practical efficacy of the cluster concept as the I.D.A.'s primary strategy for regional industrial development. Contrary to original I.D.A. policy, Buttevant which is a critical cluster growth town has not been developed. At the present time the town has a population of twelve hundred and of these over two hundred and eighty are unemployed. Between 1980 and 1986 the number of people employed in industry in the town decreased from over two hundred people to zero. Any development that has taken place within the cluster has not produced any marked 'multiplier' or 'spread' effects. The level of employment opportunity in the cluster is very low. The low level of employment opportunity within the cluster has resulted in increasingly long distance search for work and journey to work patterns (Fig 4 & 5). Buttevant, despite the fact that it was accorded growth town status by the I.D.A. in 1972, is still suffering from socio-economic effects of an employment 'haemorrhage' that began in 1980 with the closure of the towns primary employment facility, Buttevant Concrete Products Ltd. To date, the scale and nature of the development that has occurred in the cluster has been insufficient to 'cushion' Buttevant's employment losses. Although Buttevant is a cluster growth centre no industrial base has been created in the town. The Buttevant cluster itself would seem to be exhibiting all of the signs of economic decay. The town of Buttevant is important in its own right because it is symptomatic of a strategy that has fallen prey to an economic 'malaise' of unmanageable proportions. The failure of the I.D.A. to develop Buttevant, and to guarantee the success of the cluster concept as a development strategy, is further emphasised when one considers the extent of the I.D.A.'s vast financial injections. Between 1982 and 1984 for example, the I.D.A. invested a total of £5,160,829 (Table 1) in the growth towns in the Buttevant cluster. This significant financial commitment refers purely to capital grant assistance and does not include the money expended on the provision of a fifty acre 'landbank' and 42,000 sq ft of advance factory space. In the Buttevant cluster this vast financial and infrastructural investment would seem to have produced a negligible return. Contrary to the I.D.A.'s assertion that it would promote the cluster as a unity for purpose of attracting and developing industry, the cluster growth towns have started to compete with one another for assistance and capital funds by the I.D.A. within the cluster. This disequilibrium in the allocation of financial assistance by the I.D.A. has created a growth level of intra cluster inequality in terms of employment, employment opportunity and industrial activity. Despite the I.D.A.'s extensive financial investment, the cluster growth towns have begun to compete with each other and isolated pockets of largely self-sustaining non-multiplier industrial activity. The growth towns have failed to become the socio-economic 'power houses' of the cluster as originally proposed by the I.D.A. The high level of capital investment and advance factory provision by the I.D.A. has not created the benefits promised by those who advocated the

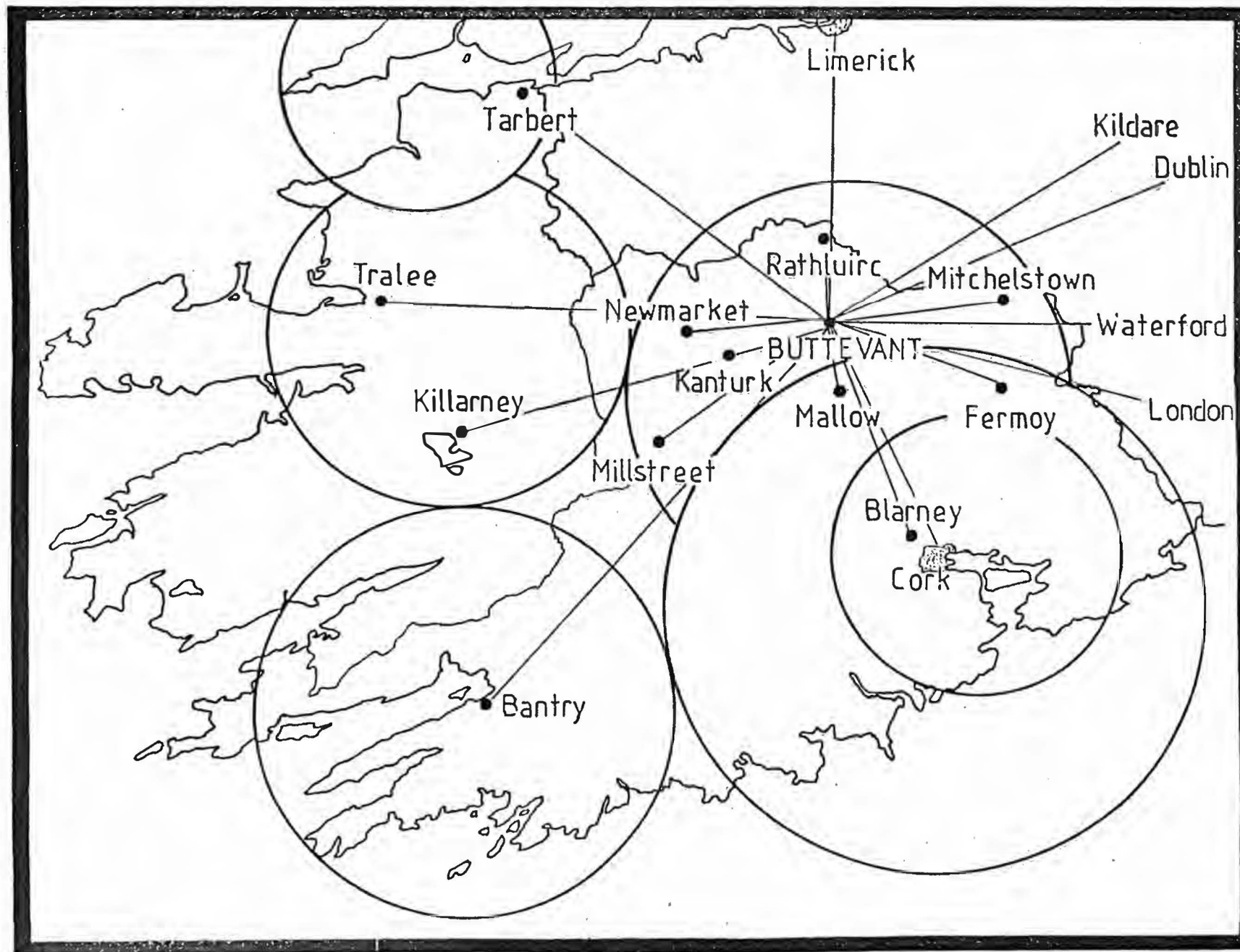


Fig.4 SEARCH FOR WORK PATTERN OF RESPONDENTS

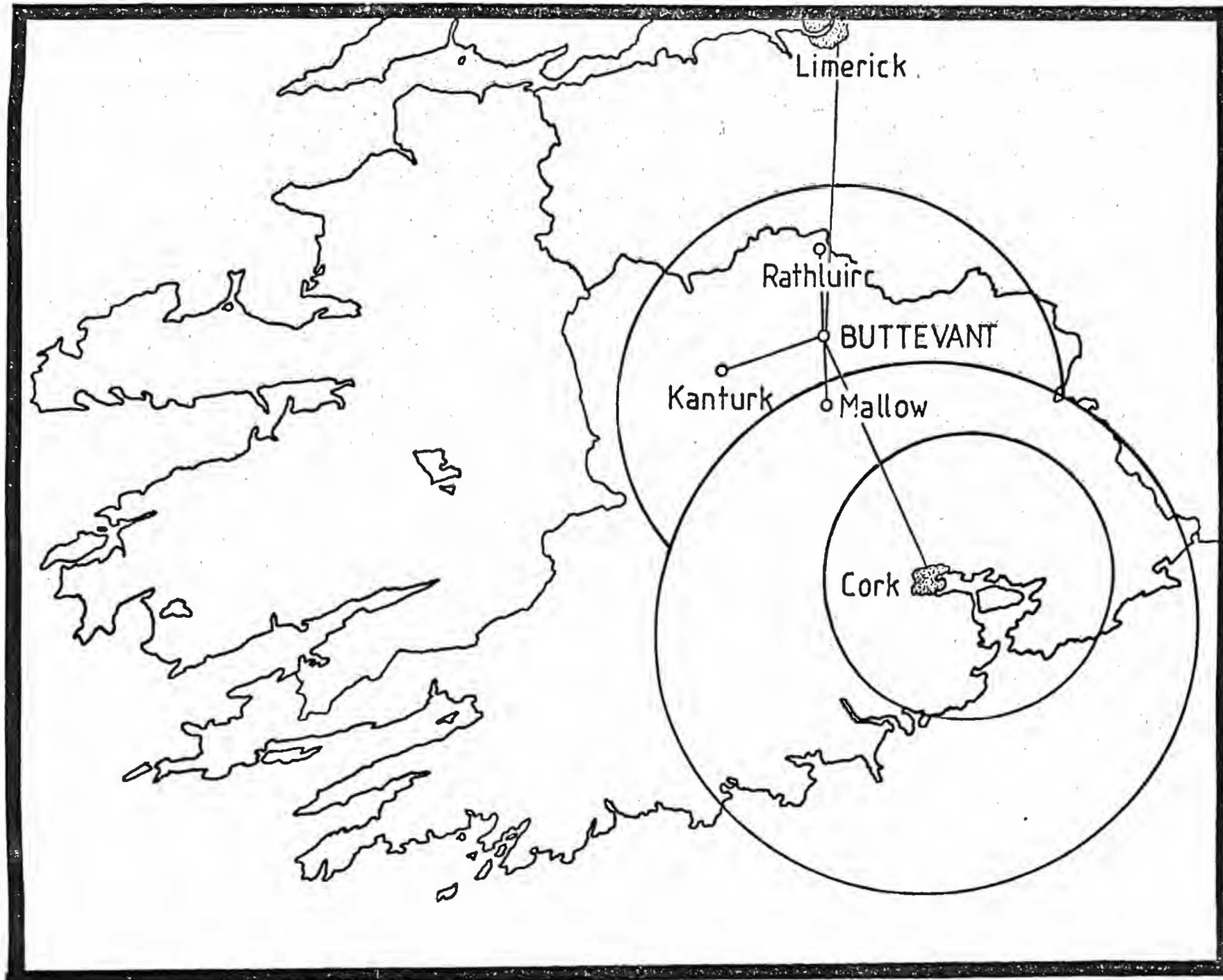


Fig.5 JOURNEY TO WORK PATTERN OF EMPLOYED RESPONDANTS

TABLE 1

THE LEVEL OF I.D.A. CAPITAL INVESTMENT IN INDUSTRY IN THE CLUSTER
GROWTH TOWNS, 1982 - 1984 INCLUSIVE

CLUSTER GROWTH TOWN	PUPULATION (approx)	PAYMENTS			TOTAL
		1982	1983	1984	
NEWMARKET	1,000	£ 9,658	£ 113,095	£ 34,987	£ 157,074
KANTURK	1,990	£ 337,843	£ 241,345	£ 106,298	£ 685,486
MILLSTREET	1,421	£ 111,546	£ 811,828	£ 443,311	£1,366,685
BUTTEVANT	1,200	£ 000,000	£ 000,000	£ 39,501	£ 39,501
RATHLUIRC	2,700	£ 724,511	£ 487,044	£ 342,787	£1,554,342
MITCHELSTOWN	3,040	£1,002,212	£ 49,704	£ 305,825	£1,357,741
				TOTAL CAPITAL INVESTMENT -	£5,160,829 =====

NOTE: The Statistical Totals refer to Capital Grant Investment.

They do not include Capital Expenditure on 'Fixed Assets' such as 'Greenfield Sites' and advance factories.

SOURCE: I.D.A. ANNUAL CAPITAL EXPENDITURE REPORTS, DUBLIN 1982, 1983, 1984.

implementation of a cluster strategy for industrial development. Unemployment in the Buttevant cluster is very high. Indeed the cluster could be described as an enterprise where the results of increased financial investment are not being reflected in a better output performance. As a result, additional large scale injections of I.D.A. funds are required to keep the strategy afloat. In the present economic climate the wisdom of this type of crisis management must be seriously questioned. In short, the I.D.A.'s cluster concept has become a high cost, low productivity, low multiplier development strategy.

THE CLUSTER CONCEPT SUCCESS OR FAILURE

The governments rejection of the growth centre strategy in the early 1970's rendered the cluster concept the key strategy designed to ensure Ireland's future national and regional industrial growth. To date, like many of the strategies for industrial location and development, it has had its mixture of success and failure. The Buttevant cluster reflects both the strengths and weaknesses, the successes and the failures, of the operational cluster.

There is no doubt that the implementation of the cluster concept in the Buttevant area resulted in the creation of a significant number of industries (Table 2). These industries which were created in the late 1970's and early 1980's are the success stories of the cluster concept. The I.D.A. played a vital role in attracting, locating and supporting these industries which employed a significant number of the workforce in the cluster. Cluster growth towns like Rathluirc and Millstreet owe a large proportion of their industrial development to the financial assistance given to them by the I.D.A. The same cannot be said of Buttevant however. The I.D.A. has continually failed to honour its commitment to develop Buttevant as a cluster growth town. In this regard the tactical approach adopted by the I.D.A. toward the development of the cluster is worthy of criticism. The I.D.A. asserted that the key elements in the development of any cluster would be its growth towns. These towns would act as the foci of the authority's efforts to create industry and employment within the cluster. A large area of the cluster and its population was thus critically dependant upon the successful development of the individual growth towns. The failure to develop a growth town would have serious socio-economic ramifications for its hinterland, and the cluster in general. The I.D.A.'s conspicuous failure to develop Buttevant as a cluster growth town has resulted in a situation where the core of the cluster is now dominated by an industrial and employment 'blackspot'. Thus it would appear that although the cluster concept was a theoretical success, a compromise between overt dispersal and overt concentration, an Irish solution to an Irish problem, the practical benefits of its implementation have failed to materialise. The I.D.A.'s failure to balance its support for each of the cluster growth towns and so multiply the spatial distribution of the benefits of industrial development has had serious socio-economic effects within the cluster. This paper supports the contention that there is a strong imbalance in the development of the cluster growth towns and that Buttevant is indicative of the unequal distribution of industrial development

TABLE 2

INDUSTRY IN THE CLUSTER GROWTH TOWNS

<u>GROWTH TOWN</u>	<u>INDUSTRY</u>	<u>DESCRIPTION</u>
<u>MILLSTREET</u>	MOLEX INC. AVONMORE ELECTRICAL CO. LTD. APPLE COMPUTER LTD.* CLARA TOY AND CLOTHING MID CORK FURNITURE LTD. BEK ARTS	I.C. SOCKETS AND CONNECTORS ELECTRICAL CONTROL PANELS KEYBOARDS AND PERIPHERAL EQUIPMENT CLOTHING WOOD PRODUCTS HAND PAINTED TILES
<u>KANTURK</u>	KANTURK FITTINGS LTD. SYSTEM CABLE LTD. MASTI CURE PRODUCTS LTD. KLOSTERTOFFELN IRELAND LTD* NIGEL C. DUGGAN CONCRETE LTD. NORTH CORK CO-OP CREAMERIES LTD. PACKO - BLACKWATER LTD. PATRICIA COWLEY POTTERY O'CONNOR J.D. & SON BINCHEY OWEN & SON LTD.*	ALUMINIUM COMPONENTS SPECIAL CABLES VETERINARY PHARMACEUTICALS CLOGS CONCRETE PRODUCTS DAIRY PROCESSING REFRIGERATED BULK POTTERY GOODS SOFT DRINKS FLOUR CONFECTIONERY
<u>NEWMARKET</u>	NEWMARKET CO-OP LTD. IMPULSE ENGINEERING LTD.	DAIRY PROCESSING OF CHEESE PRECISION METAL BRACKETRY
<u>RATHLUIRC</u>	CHARLEVILLE FURNITURE LTD SHERIDAN ENGINEERING LTD. CLARE HILLS GARMENT MANUFACTURES FLOTEC GOLDEN VALE FOOD PRODUCTS GOLDEN VALE FOOD PRODUCTS* WESTERN MEATS LTD. B.C.D. INSTALLATIONS LTD. FREEMOUNT COMMUNITY COUNCIL	FURNITURE GENERAL AGRICULTURAL ENGINEERING WORKWEAR AND CHURCH VESTMENTS FOOD PROCESSING COMPONENTS DAIRY AND PROVENDER MILLING ENGINEERING PRODUCTS AND PLANT PIGMEAT PRODUCTS PROCESS FLOW EQUIPMENT WOODEN MUSICAL INSTRUMENT CASES
<u>MITCHELSTOWN</u>	MITCHELSTOWN CREAMERIES MITCHELSTOWN CO-OP AGRICULTURAL SOCIETY TRIACE LTD.	DAIRY PRODUCTS DRYING AND STORAGE OF GRAIN PRESSURE WASHERS FOR FARM USE
<u>BUTTEVANT</u>	ADESCO LTD. *	INDUSTRIAL STERILISING AGENTS

NOTE: This table refers to industries located in the cluster growth towns and grant assisted by the I.D.A.

* ; This mark denotes an industry that is now closed down.

SOURCE: I.D.A. ANNUAL CAPITAL EXPNDITURE REPORTS DUBLIN 1982, 1983, 1984, 1985

and economic activity within the cluster. Buttevant is a victim of the disequilibrium in the allocation of capital grant assistance in the cluster and the town is suffering a demographic 'haemorrhage' as the younger and more enterprising members of the population leave the town. These most distressing trends are an indictment not only of the I.D.A.'s neglect of Buttevant, but of the low level of employment opportunity within the cluster. There was a time when Buttevant's socio-economic problems were ameliorated and compensated for, by the possibility of employment in the other cluster growth towns. This situation no longer exists however. Growth towns like Rathluirc and Mitchelstown are now finding it increasingly difficult to respond to the socio-economic needs of its own workforces. Recent industrial closures in the growth towns of Millstreet and Kanturk with the loss of almost two hundred jobs (Table 3) means that such towns cannot be expected to extend their employment 'envelope' to accommodate the employment needs of another growth town like Buttevant.

'Survival of the fittest' has become the norm in the economic relationship between the cluster towns themselves. The I.D.A. has been highly selective in deciding which growth towns should acquire significant levels of grant assistance and promotion to help them maintain their potential for development. Investigation would suggest that these towns have been chosen on the basis of population and the size of the existing industrial base. By maintaining its financial and promotional support for these towns the I.D.A. would seem to be trying to prevent further erosion of the cluster's internal economy. In this process of locational re-evaluation Buttevant has been excluded from further assistance. This decision by the I.D.A. has promoted the towns economic decline. Irrespective of this situation the successful operation of the cluster concept remains the development of the specified growth towns. Each growth town in the cluster, and not just selective growth towns should merit equal attention from the I.D.A. The benefits of industrial development in the cluster must be as wide ranging as possible, in keeping with the dispersal objective. With this end in mind a conceptual initiative designed to equalize locational priorities and balance the support given to each growth town in a cluster would be of great importance. This initiative might well be flexible designation. Designation is the term ascribed to an area classed as underdeveloped in the governments Underdeveloped Areas Act 1952. The designated areas are a block of land located predominantly in the western half of the country, where the I.D.A. in line with the governments regional policy objectives offers a higher level of capital grant assistance, infrastructural support and promotional activities. The boundary line that divides the designated areas would involve the spatial relocation of this boundary line to accommodate any cluster growth town whose level of unemployment was threatening not only its existing socio-economic foundations but its potential and attractiveness for industrial development. Under flexible designation a cluster growth town would become designated for a minimum period of two years. The period of designation would be subject to regular review. The entire package of locational incentives including the sixty per cent higher level capital grant would apply to the growth town for the period of its designated status. This type of initiative, which involves a flexible response to the socio-economic needs of the cluster

TABLE 3

I.D.A. CAPITAL PAYMENTS TO GROWTH TOWN INDUSTRIES
THAT HAVE NOW CLOSED DOWN

<u>GROWTH TOWN</u>	INDUSTRY	<u>TOTAL PAYMENTS</u>
MILLSTREET	Apple Computers	£847,871.00
KANTURK	Klosterffeln I.R.L.	£146,202.00
BUTTEVANT	ADESCO Ltd.	£ 57,659.00
	TOTAL	£1,051,732.00 =====

NOTES:-

- 1) In 1984 the three companies (see above) collectively received £119,478.00 from the I.D.A.
- 2) The collective job loss derived from the closure of these firms was 150+ (approx)

Source: I.D.A. CAPITAL EXPENDITURE REPORTS 1982-1984

growth towns might well prove to be helpful in ending the socio-economic stagnation that has begun to characterise many of the cluster growth towns. Flexible designation would seem to offer a solution for assisting the weakest growth towns in a strategy so dependant for its success upon the development of industry in these very centres.

CONCLUSION

In truth the cluster concept has not been a success. As a growth orientated development strategy based on financial incentives, and as part of a re-distributional process designed to improve inter-regional equity and contributed to general national growth it has floundered. Even at a national level a movement away from Keynesian policies of aggregate demand management towards monetarism has stifled all justification for continuing support for an inflationary policy like the cluster concept. Present economic circumstances speak for themselves. A continuation of financial support for the cluster strategy would doubtless burden an economy already strangled by a national debt which stands at IR Million 21,963, (135% of G.N.P.). The cluster concept has failed to cope with the problems posed by widespread economic recession. For the town of Buttevant and for its people, for this country and for its economy the cluster concept has become, a blunt sword in the quest for economic development.

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