

Interdisziplinäres Institut für Raumordnung
Stadt- und Regionalentwicklung
Wirtschaftsuniversität Wien
Vorstand: o.Univ.Prof.Dr.Walter B. Stöhr
A-1090 Wien, Augasse 2-6, Tel. (0222) 34-05-25

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Walter B. Stöhr

CHANGING EXTERNAL CONDITIONS
AND A PARADIGM SHIFT
IN REGIONAL DEVELOPMENT STRATEGIES ?

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1. Introduction

During the growth period of the quarter of a century following World War II which frequently is considered as the "upswing" phase of a Kondratieff cycle, regional development policies for the reduction of spatial disparities in living levels were essentially based on the spatial extension of development impulses from highly developed to less developed areas. They aimed at increasing the mobility of commodities and production factors (expecially capital, labour and technology), complemented by the improvement of transport and communications networks between centres and their respective hinterlands, as well as by public transfers, infrastructure investment and capital incentives for less developed areas (Stöhr & Tödtling 1977; Allen & Yuill 1982). In many countries these instruments were focussed upon specific locations such as "growth centres" or "industrial parks" in order to gain urbanization and agglomeration economies, both for public and private investment.

Particularly in industrialized countries these strategies helped to reduce inter-regional disparities (Molle et al. 1980), although in many cases the spatial extension of development manifested itself primarily in the "spill-over" of existing agglomerations and benefitted above all their immediate hinterland. A major exception was development based on immobile (mainly natural) resources such as peripheral tourist development. On the whole there existed in Europe during the period up to 1973 a spatial pattern of development in which both quantitative and qualitative indicators

x) Professor and Director, Interdisciplinary Institute for Urban and Regional Studies, University of Economics, Vienna, Austria

of development increased with increasing accessibility to markets and existing centers of economic activity (Keeble et al. 1981) ^{x)}
 The period in question was characterized on the whole by relatively high aggregate economic growth rates.

2. External conditions and basic assumptions of traditional regional development policies in the quarter-of-a-century following World War II

Regional development policies during this period were based on a number of external conditions and - in part implicit - assumptions which were essentially valid only until the early 1970's. The most important of these were:

- High and gradually increasing aggregate economic growth rates
 which - already via the market mechanism - promoted the spatial extension and spill-over of development from highly to less developed areas;
- low and gradually decreasing energy, transport, and mobility cost
 which, again by themselves, facilitated the spatial extension process mentioned;
- conception of development as a centrifugal diffusion process
 which needs to start in a few selected economic sectors (Perroux's "industries môttrices"), centres (Boudeville's "pôles de croissance") and geographic areas, from which it will diffuse to the remaining

^{x)} "In this centre-periphery pattern the peripheral areas (low accessibility potential) were characterized by substantially higher aggregate and youth employment rates, a growing concentration of unemployed young workes, lower output and regional income per head and per employee, proportionally fewer job opportunities in manufacturing and producer services, with a corresponding greater dependence on agriculture and consumer services, unfavourable and deteriorating manufacturing structures, a general bias towards economic activities which are declining or growing only slowly at the Community level, increasing relative inaccessibility to economic activity because of faster growth in central regions - all these have been clearly identified as highly undesirable characteristics of the Community's peripheral economies. Even apparent relative improvements in peripheral job opportunities and female activity rates have been related in this study to growth of possibly marginal consumer services as an alternative to even higher unemployment, or to the filtering-down to certain peripheral regions of older, traditional manufacturing industries whose long-term prospects are likely to be poor." (Keeble et al., 1981, p.185).

locations and economic sectors, partly through the market mechanism and partly through the aid of regional development policy;

- Assumption that modern technology can be applied efficiently only in large (physical, entrepreneurial or institutional) units;
- assumption of local or regional unity of entrepreneurial organization, in which all functional units of a firm (from decision-making to routine processing functions) were contained within one locational or regional (e.g. regional labour market) unit;
- availability of relatively abundant public funds for the promotion of the extension and spill-over processes mentioned above;
- availability of relatively large ecological, economic and political "free" spaces for the externalization of part of the cost of development, e.g. by the external availability of cheap natural resources and land, cheap manpower, external markets, etc., derived from territorial societies less organized and politically less powerful, either in peripheral regions or countries;
- assumption of a high predictability of development trends (including spatial ones) under relatively stable and controllable external conditions;
- confidence in the State's ability to "manage" spatial development by incentives, public transfers and a tight central coordination of public investment and activities between sectors and levels of government.

Most of these external conditions and assumptions however lost their validity at least by the early 1970's. As a consequence, also some of the following characteristics of regional development policies must have become obsolete.

3. Some characteristics of traditional regional development policies/processes of the growth period following World War II

Based on the forementioned external conditions and assumptions were a number of characteristics of traditional regional development policies:

- application of a relatively uniform model of development as quantitative growth, essentially derived from the success model of early industrialization based on concentrated capital investment and urbanization (to gain internal and external savings), on external development impulses and the selective utilization of specific regional resources - while putting others idle - steered by the world market. In practical terms this manifested itself both (1) in the formulation of regional development strategies: by the wide application of the growth pole concept and the "creaming" of regional resources (Hansen, 1981); and (2) in the evaluation of regional policies: by the dominant application of quantitative variables such as regional product, aggregate employment, average rate of unemployment, degree of industrialization, aggregate investment, regional per capita income, interregional net-migration, etc. (Stöhr and Tödtling, 1982) to measure the effectiveness of regional policies
- Wide neglect of societal, political, ecological, and qualitative and structural aspects of development which particularly for the spatial articulation of development prove to be of great importance. These aspects include the degree of regional identity (Guindani and Bassand, 1982), of regional decision-making structures (Naschold 1968), of regional ecological circuits (Amery 1976) and of such qualitative and structural characteristics as the level of qualification of regional labour markets and the degree of external steering of regional plants (Tödtling 1981). These territorially organized dimensions of development have frequently been negatively influenced by models of development oriented unilaterally towards economic growth.
- Predominant mobility and capital orientation
Major regional policy instruments were oriented towards increasing the mobility of commodities and production factors and consisted

in spatially differentiated investment incentives, regionalized infrastructure investment and public transfers to less developed areas. Regional innovation capacity or qualitative and structural characteristics of regional labour markets (Stöhr and Tödtling 1982) however were hardly given attention in traditional regional development policies. These aspects however have gained increasing importance since the operation of multi-regional and multi-national enterprise has led to a new spatial division of labour (cf. below). These corporations, due to their internal organisational capacity, have been able to bridge space relatively easily. Their transfers of capital and technology, however, were naturally guided by their own functional criteria - which were not necessarily in accord with the interests of territorial communities in their sustained and diversified development.

- "Creaming" of regional resources (Hansen 1981) steered by the world market and under decreasing territorial control. The forementioned mobility and capital orientation of regional policies led to an externally-steered selection of regional resources - frequent over-utilization of some resources for world market use along with idleness/decay of others - which however frequently constituted important components for a sustained and equal development of regional communities. Over-utilization frequently applied to natural resources (exhaustion of non-renewable or deterioration of renewable resources), to specific labour segments (e.g. cheap young female labour for routine production processes along with unemployment in the remaining segments); idleness/decay frequently applied to land ("Sozialbrache", social fallow), to regional energy sources (small-scale power stations), to specific regional labour market segments (usually the less mobile and less productive ones) to regional entrepreneurial talent, as well as to regional community (e.g. self-help) and public institutions. This was frequently accompanied by an erosion of local supply functions, affecting particularly the less mobile and economically weaker strata of population.

- Unilateral orientation towards international division of labour.

Particularly for peripheral areas (both rural or "old industrial" ones) - and distinct from major interaction centres - this has frequently led to a narrow specialization of economic activities with relatively high exposure to external change and crises, and to a narrow qualification spectrum of employment. Peripheral areas both at the national and at the international scale (Seers et al. 1979, 1980, 1983) usually show a narrow specialization upon such activities as supply of food, raw materials, manpower, and the provision of low value-added products, of tourist areas, and second homes. Their functions have become unilaterally oriented towards the (frequently unstable) requirements of highly developed core areas. They thereby also have become subjected - in relation to the products and services supplied by highly developed core regions - to unstable exchange relations and deteriorating terms of trade.

- Spatial redeployment of intra-firm functions.

The mobility and capital orientation of traditional regional development policies, along with the increasing scale of operations of multi-regional and multi-national enterprise, have led to a new spatial division of intra-firm functions with increasing locational separation between individual functions such as routine production processes, prototype production and design, marketing, research and development, entrepreneurial and decision-making functions over space (Stöhr and Tödtling, 1982). Whereas the earlier mentioned (routine) functions tend to shift to less developed peripheral areas, the latter (key) functions tend to concentrate in highly developed core areas. In Austrian test areas, for instance, the share of jobs in extra-regionally steered (branch) plants with dominant routine activities was eight times as high as in the corresponding core areas (Tödtling 1981; Stöhr 1981/c). Routine activities have furthermore shown a tendency to be dislocated from industrialized countries' less developed areas to the still

cheaper and less organized labour markets of Third World countries, thereby increasing the economic instability of the former areas.

- Unilateral orientation towards extra-regional factors.

Parallel to the unilateral orientation towards extra-regional demand (manifested typically by the importance given to the export-base concept) there occurred an increasing orientation towards extra-regional inputs of capital, labour, technology, -entrepreneurial functions as well as external public subsidies. This led both to an increased regional dependence on external factors - and at the same time to reduced incentives (and chances) for mobilizing a broader spectrum of endogenous regional resources -; at the same time it also led to "leakages" from less developed areas in the form of factor returns (interest and profit transfers, royalties, etc.) often exceeding the inputs from core areas in the form of capital investment, migrant-labour savings remittances, etc.. The possibility of such leakages was increased by the transfer-pricing flexibility of multi-regional and multi-national companies.

- Spatial "displacement"/export of bottlenecks and adjustment problems to peripheral areas and countries

Particularly in the highly developed core regions there existed a tendency for the spatial displacement of regional "bottlenecks" towards (usually less organized) peripheral areas in order to avoid or postpone the need for internal restructuring (at the world scale cf also Marchetti, 1981): urban physical expansion instead of internal urban renewal; displacement of polluting economic activities and/or second residences to peripheral areas instead of the early introduction of pollution abatement devices and the improvement of residential quality in core areas; spatial expansion of labour markets by the attraction of commuters and migrant workers over increasing distances instead of the early rationalization and internal structural transformation in core areas suffering from labour shortage (particularly during phases of rapid growth); reliance of highly developed core areas on assumedly unlimited and cheap availability of natural resources, energy, environmental reserves, labour etc. from less developed areas and countries as "free" spaces, instead of the introduction

of resource-saving production technology and consumption patterns; reliance of industrialized areas and countries on unlimited external markets, supported by what Marchetti (1981) calls the "mega-lie" of international loans, rather than internal restructuring of highly developed areas.

- Unilateral reliance upon large-scale, high energy demanding interaction systems.

The unilateral reliance on external markets and inputs as well as the spatial "displacement" of bottlenecks and the high degree of spatial specialization led to a concentration on large-scale, relatively energy-intensive interaction systems. In many cases they substituted small-scale, relatively energy saving interaction systems (in the form of regional economic, but also social, cultural, political, and ecological feed-back mechanisms) which had constituted important societal stabilizing and self-regulating mechanisms. These now had to be replaced by other - usually bureaucratic and centralized - regulatory mechanisms at larger scales.

- Elevation of economic and political decision-making scales.

As a consequence, there also took place a shift in decision-making scales to national and multinational levels, e.g. multinational enterprise, national/international finance and development institutions and multi-national political bodies such as the European Community. Such large-scale functional institutions assumed increasing roles also for regional development policies. The population and enterprises in individual regions were increasingly relegated to a feeling of helplessness and dependence from - both spatially and hierarchically - increasingly distant decision-making centers which took their decisions frequently abstracted from specific regional problem situations. Many of the recently emerging grass-roots movements no doubt are a reaction to this fact.

- Regional disintegration and debilitation of regional self-help and regulatory capacities

The displacement of local and regional interaction systems by large-scale ones has led not only to the overutilization/idleness of regional resources but - as a consequence of the weakening of local and regional feedback mechanisms - also to a reduction in the flexibility and innovative capacities of local and regional communities. Particularly in periods of low aggregate economic growth rates and rapidly changing external

conditions, this appears as an essential condition for dynamic and equal regional development however. A systems-analytic explanation for this assumption will be given below.

The lack of flexibility as a consequence of the petrification of (usually centralized) institutions is today considered as one of the major handicaps to development (Olsen 1971). Bassand and Giundani (1981) have characterized the situation of less developed peripheral areas in this respect as follows: "Presently these regions have lost their productive capacity, they are not adapting to modern technological requirements, have no possibility to develop endogenous economic initiatives, their labour force is less qualified and lower paid than that of other regions, their managers are not rooted in the region, a feeling of anomy tends to penetrate the entire region".^{x)} Even in countries in which regional disparities in terms of quantitative growth have decreased, these qualitative and structural transformations (Stöhr and Tödtling 1982) have taken place under the surface of regional quantitative growth - in part promoted by traditional regional development policies.

4. Changes in external conditions since the early 1970's

At least since the early 1970's it became clear that the external conditions which had dominated the quarter of a century since World War II were changing, and as a consequence also the basic assumptions which had been underlying traditional regional development policies increasingly became invalidated.

The realization of these changing external conditions was signalled on a worldwide scale by the first Report of the Club of Rome (Meadows et al. 1972), the results of which were scrutinized and disaggregated by continental regions subsequently in the second Report of the Club of Rome (Mesarovic and Pestel 1974).

^{x)} Translation by this author

One consequence to be drawn for our present purpose here is the realization of the successive disappearance of "free" spaces mentioned above - in ecological, economic but also political terms - on a world scale and also within individual countries. For our present purpose this means that the development of individual continents, nations, but also regions, can take place less and less via the "displacement" of bottlenecks and costs of development to other areas, but requires increasingly the territorial internalization of the costs and side-effects of development, accompanied by the required structural transformations within the specific territorial units.

Changes in external conditions for regional development - as well as for development in general - have taken place in a number of aspects:

- reduced aggregate economic growth rates which at the same time lead to a reduction/disappearance of the spatial extension and the "spill-over" effects from the highly developed core areas;
- increased and (in the medium and long term) at best stabilizing cost of energy, transport, and mobility which - in addition to the forementioned fact - will further reduce incentives for spatial extension effects and spill-overs from highly developed areas, and will at the same time make large-scale physical interaction systems more costly than they had been before;
- over-all reduction in the availability of public funds, and in this context also of those so far used to promote the spatial extension and redistribution of activities;
- disappearance of "free" spaces in ecological, economic, and political terms for the externalization of the cost of development and the spatial "displacement" of bottlenecks and problems of structural transformation. This is caused on the one hand by the fact that many peripheral areas - nationally or world-wide - have actually reached the limit of the medium or

long-term exhaustibility of their resources; and on the other hand by the fact that many peripheral areas and countries have increased the level of their own and mutual organization and are thereby able to resist more effectively the external "combing out" of their resources and the "displacement" of development problems and bottlenecks from highly developed areas. Typical for this fact is the increasing resistance of peripheral areas (although so far mainly of industrialized countries) against environmentally damaging projects including the disposal of polluting residues.

Highly developed core-areas or countries will in future therefore increasingly have to look for internal solutions of their bottlenecks and development problems as well as for a more careful use of their own resources. In many cases this will require more sustained policies of endogenous structural transformation instead of the traditional externalization of these costs.

As a positive element in this context may be considered the fact, however, that in the past bottleneck situations have frequently been constructive in promoting innovations (North and Douglass 1973, Wilkinson 1973);

- increased public consciousness of energy and environmental issues which has led to a broad resistance against the over-exploitation of natural resources. In future this may also become a handicap for increases in the scale of economic interaction radii;
- availability of new technology applicable in decentralized patterns. These new technologies, based in part on the use of microelectronics, can increase the flexibility and innovative capacity of small and decentralized units which, particularly if they are e.g. accompanied by corresponding changes in the organization of work, can effectively compete with and in this respect even outdo large and centralized units (Sabel 1982);
- Changes in the understanding of development. Development is increasingly considered as not merely quantitative growth initiated by central mechanism (such as the market

mechanism or central institutions) but rather as the broad development of human capabilities on the basis of their respective historical, societal, and natural conditions. This concept of development requires a societal transformation process in which economic, cultural, political, ecological, and other factors need to interact. Dudley Seers (1977) has spoken of a "new meaning of development". Traditional, centrally steered regional development policy with their major emphasis on capital and technology transfers, for this purpose appear too narrowly defined and sometimes even counterproductive for such objectives. In this "new" concept of development factors such as regional identity and territorial political participation play an important role - factors which traditional mobility and capital-oriented regional policies have frequently counteracted.

- Increasing pressure for local and regional participation.
The increasing centralization of determinants of development has led to amounting pressures on the part of local and regional communities for more participation in decisions affecting their concrete local and regional living conditions. This is manifested on the one hand by an increasing number of local citizens' initiatives (usually cutting across traditional party lines) to influence public decisions, on the other hand by an increasing search for neighbourhood interaction and local and regional identity (expressed e.g. in the resurgence of local and regional museums, of regional architectural conservancy). This is no doubt in part a reaction to the above mentioned disintegration of local and regional communities and their increasing feeling of helplessness vis-a-vis external influences.
- Increased "turbulence" of worldwide economic structural change
which, with increasing frequency, is causing local and regional crisis situations in the form of plant closures and local unemployment. In part this is related to the above mentioned spatial redeployment of intra-firm functions of multinational enterprise (Glickmann and McLean Petras 1981). In this way the regional export-base multipliers of recent growth periods have frequently been transformed into regional shrinkage and crisis

multipliers. A greater selectivity in the application of the export-base concept and possibly new criteria for related project evaluation (e.g. minimizing price elasticity instead of maximizing elasticity of demand) may be required for future regional development policies.

- Relatively high stability of small and medium size enterprise. Particularly in periods of reduced aggregate growth and increased economic structural change, small and medium size enterprise has frequently shown more resilience and stability in employment than large enterprise (for the USA cf. Birch 1979; Bluestone and Harrison, 1980; for various European countries cf. Hjern and Hull 1980).

- Reduced "predictability" and reduced "manageability" of regional development with traditional methods

Traditional methods of policy-oriented regional analysis have (often implicitly) assumed a high degree of stability of external parameters, an assumption which has become invalidated by the increasing turbulence mentioned. - Similarly, traditional regional policy has - often based on the results of these analyses - confided in the satisfactory "manageability" of regional development by centrally steered and (as tightly as possible knit) coordination systems. - Only under stable and controllable external conditions such central and hierarchical control mechanisms - typically operating via open feedback loops - are able to give optimal results as Rappaport (1982) has shown. Rappaport has also shown, however, that under conditions of external instability, optimal systems performance can only be reached via closed feedback loops which, via negative feed-back effects, facilitates 'the continuous correction of control vectors in case of major deviations from an equilibrium state, thus permitting flexible reactions and the consideration of unforeseen external change in a process of learning via random reactions' (p.11 f; translation by this author). For optimal regional development therefore closed feedback

loops would be desirable at all important spatial levels - including the local and regional ones - in order to increase to the largest extent possible the flexibility and innovative capacity of regional systems in view of changing This would require the preservation or re-establishment of (frequently formerly available) economic, social, political, and ecological interaction network and feed-back mechanisms, at local and regional levels.

The increasing turn-away of countries of different economic and political systems from all-embracing central planning schemes both in economic and spatial guidance systems (e.g. in France, the GFR, Switzerland) points in the same direction.

This corresponds to the experience of entrepreneurial organization where also decentralized product-oriented feed-back mechanisms have proved much more flexible and innovative than centralized functional ones (Kolodny 1982).

5. Some theoretical criteria for regional development policies under changing external conditions and reduced aggregate growth rates

In principle it could be said that under such conditions regional development policies should:

- facilitate the development of less developed areas also without the dynamics derived from aggregate economic growth,
- not be based primarily on "spatial extension" or "spill-over" effects,
- not rely on sizeable public financial inputs,
- be energy and resource saving,
- aim at the broad mobilization and mutual interaction of regional resources (rather than at their selective "combing out" for large-scale economic circuits),
- be differentiated according to specific regional economic but also non-economic factors such as regional cultural characteristics, regional identity, regional participatory structures and environmental conditions (rather than apply a uniform urbanization - industrialization model),
- be oriented towards increasing the endogenous regional problem-solving capacities (rather than relying mainly on external factors and on "displacing"/^{exporting} regional bottlenecks and problem situations),
- promote small-scale social, economic, political, and ecological circuits and thereby increase the flexibility of regional social systems, particularly their adaptive and innovative capacity,
- increase the role of lower (local and regional) decision making scales in the development process.

In order to facilitate this, no doubt changes in the traditional operation of central agencies (at the national and international scale) will be necessary. Some of these elements were in fact envisaged already in various of the recent (though in part only proposed) regional policy responses.

6. Some regional policy responses to changing external conditions

Regional policy reaction to these changing external conditions in general was slow, in part because awareness that the economic recession since the mid-1970's was due to more deeply rooted causes emerged only slowly (Bruder and Ellwein 1980).

Initially, one way to react was to 'do more of the same', i.e. intensify still further traditional regional policy instruments, possibly to refine their criteria and spatial orientation towards specific crisis areas and locations, and to shift within this framework from indirectly to more directly effective instruments (Stöhr 1982/a).

Frequently parallel to the above, "fire-brigade" type crash programs were undertaken by central government in order to mitigate the short-term effects of plant closures or unemployment in (usually mono-structured) "old" industrial areas affected by sectoral crises. These crash programs mainly consisted in public subsidies for crisis ridden plants, or in the attraction of substitute employment in the form of subsidized new plants, frequently branch plants of transnational enterprise with little more employment stability (Moser 1982). These crash programs however usually did not change the basic structural deficiencies of most of these crisis ridden areas, i.e. their dependence on few sectors, few (usually large) plants, and their lack of innovative and adaptive capacity.

A further type of policy reaction were efforts to introduce an "innovation-oriented regional policy" (e.g. Ewers und Wettmann 1980; Ellwein und Bruder 1982; Brugger 1981 u.1982; Thwaites et al. 1981) directed mainly towards increasing the rate of industrial process and product innovation and its spatial diffusion. They are mainly oriented towards technological and entrepreneurial innovation, however.

As regional innovative and adaptive capacities in part also depend on regional socio-political structures, recent policies of political, administrative and planning decentralization in

countries such as France and Spain are also of considerable relevance in this context. These policies in most cases were taken in response to political (and in some instances ethnic) pressures for more regional participation in decision-making processes, while more complete knowledge of their consequences for regional (including economic) development so far are only scarce (see also below).

Beyond this, more complex changes in political-institutional structures towards an "alternative spatial policy" by the organization of territorial countervailing power of "spatial victims" have been proposed for the FRG (Naschold 1978), as well as on a somewhat different conceptual basis, derived primarily from U.S. and Asian experience (Friedmann and Weaver 1979), as well as from that of different socio-political systems of the three developing continents (Stöhr and Taylor 1981); the latter approach has recently also been applied to peripheral and semi-peripheral industrialized European countries (Stöhr 1981/b and 1981/c). As these proposals in part require considerable changes in institutional and power structures as well as new alliances of social and territorial groups they must, on a broad basis, probably at best be considered as medium or long-term alternatives to existing policies.

Another initiative for a "labour-oriented regional policy" (Ganser et al. 1981) probably must also be considered as at best a medium-term alternative. This proposal was prepared for the Alpine region, and consequently also for peripheral conditions both in a vertical (altitude) and in a horizontal sense (areas mostly outside the EC and therefore of reduced accessibility to major European agricultural and industrial markets). This proposal avoids to stress required overall socio-political changes and rather aims at a more explicit regionalization of existing national structural policies. It furthermore puts major emphasis on the qualitative upgrading of labour, on the promotion of new employment opportunities geared towards a high level of qualification, stability and environmental compatibility; it pleads for cooperative and self-management structures: within firms, in inter-firm cooperation, and in regional development corporations.

Beyond these conceptual propositions, however, a number of programs for the mobilization of endogenous resources of peripheral areas have been experimented with recently also by some central governments. The Austrian Federal Chancellery e.g. has, in 1979, introduced a Special Programme for the Promotion of Structurally Weak Rural Mountain Areas (Bundeskanzleramt 1981/a and 1981/b) oriented towards the increase of income in areas of poor accessibility to medium and higher level centres by: the mobilization and processing of regional natural resources, energy and talent; a reduction of production costs by the application of inexpensive and simple technology, by cross-sectoral cooperation and by (preferably cooperative) entrepreneurial forms providing for the equal distribution of economic risks and benefits amongst its members. - This program is accompanied by advisory and evaluation services of the Mountain Areas Action Fund (Bergland-Aktionsfonds) and more recently also by labour market and job creation advisors supported by the Ministry of Social Affairs. - These central government initiated programs are complemented by a network group providing study and advisory services for crisis ridden regions and enterprises (Studien- und Beratungsgesellschaft: Alternativ- und Sanierungskonzepte für Regionen und Betriebe) founded in 1981 on a private basis.

Beyond this, in many countries innumerable locally or regionally initiated territorial development schemes exist (see e.g. Baumhöfer 1982), a small selection of which we shall characterize in the following section. We shall concentrate on examples in spatially disadvantaged peripheral areas.

We shall see that these mainly endogenously supported programs - some of which have now been successfully operating for decades - by intuition or by trial-and-error, typical for "learning" societies characterized by relatively closed feedback loops, unite many of the theoretical criteria outlined under point 5) above as well as many elements of the recent regional policy responses just outlined in this point 6).

7. Regional development under unfavourable external conditions -
Some examples of primarily "endogenous" peripheral regional
development with scarce external inputs.

High accessibility to inputs and markets has usually been considered a major determinant of regional growth (Perloff et al. 1960, Keeble et al. 1981). Peripheral areas would therefore normally be expected to encounter greater handicaps for development than core areas, or to depend to a higher degree on external inputs.

If the development of peripheral regions takes place without such external inputs, it must be assumed that its development is to a great extent endogenously determined. In the present context this seems of particular interest for most regions, including the traditional "centers" and old industrial areas which recently have equally been subjected to crisis situations ^{x)}; also for these, external dynamics derived from aggregate economic growth are in future likely to constitute a much less reliable basis for sustained regional development.

Examples of endogenously sustained development in peripheral areas no doubt are numerous. Knowledge about them, however, is dispersed, last not least because under the predominantly centralized structure of existing news and information media, their information can not compete with that on large - frequently intently spectacular and prestige-oriented - projects of large organizations or central government and financing institutions.

For attempts towards endogenous regional development "from below" in the Third World, I have attempted an admittedly sketchy survey in another context (Stöhr 1981, p.67 ff.). Further relevant information is currently contained in the publications of the International Foundation for Development Alternatives (IFDA) Geneva, of the International Research Centre on Environment and Development (CIRED) Paris, the Dag Hammarskjöld Foundation, Uppsala, and of the Arkleton Trust, Scotland. Recently also the Society for International Development, Rome, is dedicating special attention

^{x)} Keeble et al. (1981) state e.g. that "The dramatic growth in total EEC unemployment since 1973 has been heavily concentrated in its central, not peripheral, regions." (p.iii).

to such efforts in their "grass roots initiatives and strategies programme (gris)".

Until recently state institutions in most countries have been from sceptical to negative towards such efforts of endogenous regional development, partly because they may have feared to lose control over such initiatives and/or not to participate politically in their possible success. More recently however, also government sponsored institutions have paid increasing attention to such efforts such as the OECD in its "Cooperative Action Programme on Local Initiatives for Employment Creation" initiated in July 1982.

For industrialized countries there exist some well documented analyses of relatively successful examples of predominantly endogenously supported regional development programs in peripheral areas of both North America and Europe. They seem of particular interest in the present context as they comprise areas which, due to their peripheral location both in the national and continental context, were in unfavourable conditions to benefit from aggregate economic growth. Due to their location at the continental periphery, they were also little able to benefit from continental integration schemes such as that of the European Community.

Of particular interest in this context appear to be the community economic development cooperatives in the Atlantic provinces of Canada (Clarke 1981) as well as a number of endogenously induced economic development programs along the Atlantic coast of Europe: In the Basque country the Mondragon Cooperative Federation (Thomas and Logan 1982) which has been successfully operating for several decades; the more recently evolved Irish Community Cooperatives, the experiences of which recently have also been applied to the Western Scottish Island and Highland areas (Bryden 1979, Storey 1979). This appears like an interesting exchange of experiences between peripheral areas.

7. Characteristics of some examples of predominantly "endogenous" regional development in peripheral areas

The above examples - in spite of the differences in their historical, cultural, natural, economic, and other conditions appear to have some characteristics in common which, no doubt, still need to be analyzed in more detail and complemented by further relevant examples in order to permit generalizable conclusions. We have in the following concentrated on examples of sometimes considerable duration and therefore experience (in one case several decades) in areas of peripheral location to national and/or continental markets and inputs and decision making centers. Of particular interest in this context were integrated programs with multifunctional and predominantly territorial (regional) organization which exist in the areas mentioned in the preceding section. They have the following common characteristics:

- Relatively wide differentiation of development strategies applied

As distinct from more centrally steered regional development policies which were essentially based on the relatively uniform success model of early industrialization and urbanization, these endogenous programs appear to be much more differentiated. To a high degree they are based on the specific historical, cultural, institutional, and natural conditions of the respective areas and are aimed at the broadest possible mobilization of local and regional resources (natural, human, capital, etc.) for the satisfaction of basic needs of the regional population.

- Societal complement to market mechanism

Many of these initiatives give priority to the production of goods and services considered to be socially valuable in the region, as well as to the satisfaction of basic needs of specific target groups, both criteria which it was

felt were not sufficiently taken care of by the market mechanism (Clarke 1981). The Mondragon Cooperative network in the Basque Country e.g. guarantees its members employment within its region-wide Federation and within a radius of 50 km from the member's location of residence. It has also in principle excluded arms and nuclear components from its production program (although the latter principle is said to have recently been undermined).

- Participation: a necessary but not sufficient pre-condition
Most programs provide for as broad as possible a participation of its members, both in decision-making and forthcoming benefits. In some cases this participation is primarily firm or sector-related and only in second instance regionally organized (e.g. Mondragon in the Basque country), in other cases their organization is primarily territorially based (e.g. the community economic development cooperatives on the Atlantic coast of Canada or of Western Scotland). The Mondragon Cooperatives, which specialize along product or sectoral lines, have recently however found it useful to also form territorially organized sub-groups ("Grupos Sociales") in order to increase their collaboration. In many of the cases mentioned this participation and collaboration takes place parallel or outside (sometimes even as a counterweight to) the constitutionally provided for local and regional representative bodies (which in many cases have traditionally been dominated by small elites or central government representatives).
- Trans-sectoral orientation
In contrast to the economic monostructures which have emerged in peripheral areas during the last decades (frequently specializing in the exploitation of natural resources or cheap labor) - and in part as a reaction to this fact - most of these initiatives aim at a more diversified multi-sectoral development ("standing on more than one leg") and also at an increased intra-regional mutual interaction between sectors and economic functions.

- Promotion of regional economic and financial circuits

To counterbalance the increasing internationalization of economic and financial circuits, many of these initiatives aim at the strengthening of intra-regional economic and financial circuits. This is to facilitate the retention of a higher share of value-added within individual regions, to safeguard regional investment requirements, to increase the innovative capacity within the respective regions and to make them more resilient against the direct impact of world-wide economic shocks. The Mondragon Cooperative Federation with its more than 160 enterprises e.g. has, even during the recent crisis years, been able to increase employment and generate new enterprises, while the greater remaining part of the Basque economy is in serious crisis and burdened with an unemployment rate of more than 20 %. Depending on the type of region, a higher degree of processing of regional resources, of regional research and training, more intensive regional interaction between economic sectors and/or between producers and consumers (e.g. producer-consumer cooperatives) are aimed at.

The promotion of regional financial circuits takes place either by direct organizational linkages between regional financing - production - research/training functions (e.g. in the Mondragon Federation in the Basque country) and/or by the establishment of regional development banks (in the Mondragon case the Caja Laboral Popular). Both measures aim at a higher degree of regional influence on the financing of regional products and innovation, as well as on the broadest possible mobilization of regional savings/profits for regional development, i.e. of resources which in the absence of adequate regional institutions would tend to leak to other areas. Thereby these regional institutions are to perform a catalyst function which external institutions are expected not to fulfill in a corresponding way. Both these measures could also help to turn the interregional terms of trade in favour of the respective peripheral areas

via a higher endogenous mobilization of capital and technology. Similar intentions seem to underlie the demands which were levied at the regional level in France following the planning reform law of July 1982 for a "Strengthening of the industrial system / research and development / training complex" within regions (Council of Europe, 1982).

- Innovation orientation: multi-level and not restricted to technological innovation

While the concept of "innovation-oriented regional policy" which developed in recent years (Ewers and Wettman 1980, Thwaites et al. 1981, Ellwein und Bruder 1982) was mainly related to technological innovation - either by process or product innovation - many of these programs also include innovation in the organizational and institutional spheres, such as in the forms of decision-making and co-operation, in organization of work, etc.. Most of them contain new (or revitalized old) forms of entrepreneurial regional co-operation and broad democratic decision-making.

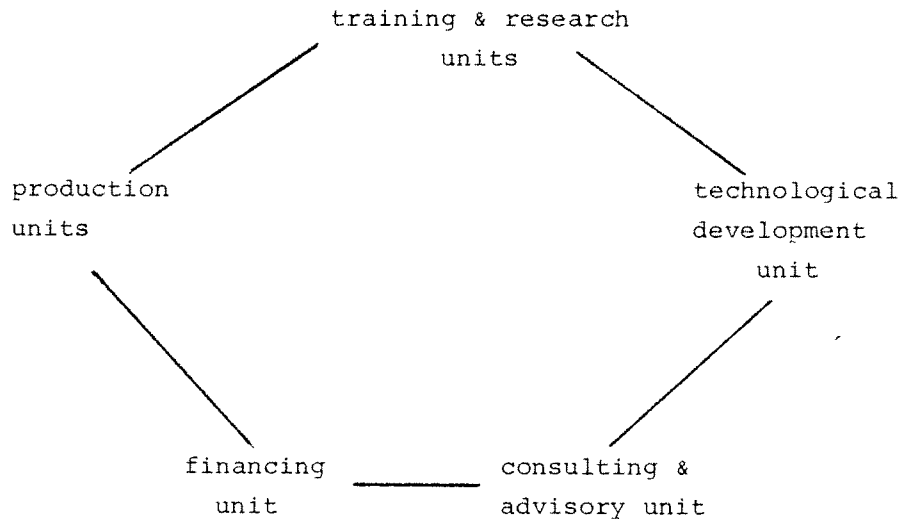
In the sphere of technological innovation they include the promotion of parallel technologies, e.g. of potentially decentralized (human-capital intensive) technologies applicable to small and medium-sized plants along with the traditional promotion of (finance-capital intensive) large-scale technologies. This may also require changes in the organization of work and in the institutional sphere (Sabel 1982).

Of particular interest in this context is the Mondragon co-operative Federation in the Basque country which, as mentioned, provides for an endogenous research-training-production-innovation-financing complex with direct feedback loops (Thomas and Logan 1982). This has in various cases permitted its enterprises a much higher innovation rate compared to corresponding enterprises outside its network.

Diagr.1:

Territorial feed-back mechanism for technological innovation

(example Mondragon Cooperative Federation, Basque Country)

- Promotion of territorial identity

Most of these programs are either based on, or aim at, a high degree of regional identity - be it retrospectively in the sense of ethnic or historical communality, or prospectively in the consciousness of a common future fate. The presence of regional identity appears as an important prerequisite both for the co-operation between diverse (often for economic and political reasons divergent) interest groups within the region, as well as for the retention or recuperation of initiative and creative personalities in the region.

- Integration between regional economic functions, regional identity and decision-making structures

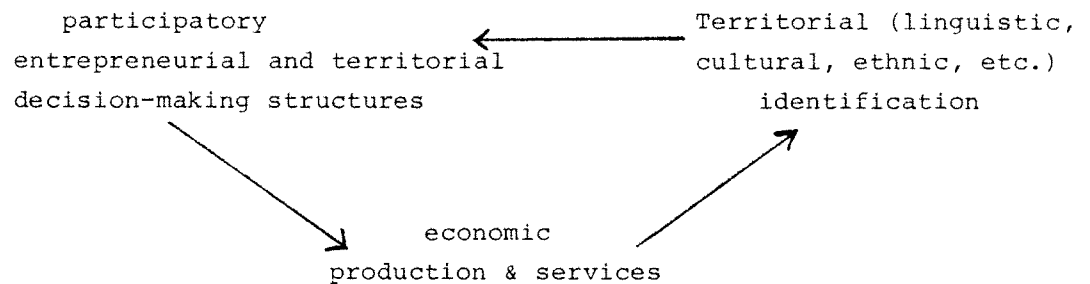
In most of these programs a direct linkage between economic (production, service) functions with regional decision-making processes (of workers and/or consumers) in various forms of entrepreneurial or territorial self-determination are provided for. This usually provides also for a high degree of identification of the local/regional population with these programs. Many of them take the form of co-operatives. The Eastern Canadian community economic development

programs furthermore are open for participation of all members of the respective municipalities and at the same time subjected to various forms of democratic control by them through contact and coordinating committees (Clarke 1981). In many cases the economic crisis situation, together with a high degree of regional identity, appear to have had a strong mobilizing effect upon the local population (Clarke 1981, p.14 ff.) particularly if a high share of younger age groups was still present and no rigid social stratification existed within regions (Bryden 1979, p.31).

The economic effects of a stronger articulation of regional identification and decision-making structures has in practice been proved e.g. by the emergence of new enterprises and economic sectors (editorial, research and training institutions) following the granting of more self-determination on linguistic and ethnic grounds in Western Scotland (Storey 1979). Similarly, the granting of more administrative self-determination in Western Scotland (e.g. through the formation of a separate administrative and planning region for the Western Islands) has led to the creation of a number of new processing plants for regional resources, especially agricultural and fishery products (Storey 1979). In the Basque country, regional cultural and ethnic identity no doubt has been an important motor for the development of endogenous development organizations such as the Mondragon Cooperative network.

In France, the recently introduced regionalization of planning and political decision-making also seems to have economic effects as it is said e.g. to have led to the "re-discovery" of the role of small and medium firms for regional development and to their reinforced promotion (Constantin 1982).

Diagr.2: Territorial feed-back mechanisms
for societal innovation



- Promotion (or at least permissiveness) on the part of central authorities - linkage to transregional co-operative networks

In almost all cases such "endogenous" development was only possible if the respective central government agencies were willing to either tolerate them, or promote them in a way guided not primarily by central agency interests. Furthermore it proved essential that such development was supported by - frequently informal, but in any case not politically dominated by established institutions - co-operative networks or "committed link cadres" (Haque et al. 1977, p.61). These "link cadres" frequently fulfilled important functions in strengthening the bargaining position of regional groups vis-a-vis central authorities or external (multi-regional) economic enterprise, in training and consulting, as well as in increasing the local consciousness of the reasons underlying existing problems and of the required self-organization for overcoming them (Clarke 1981, p.57 ff.).

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