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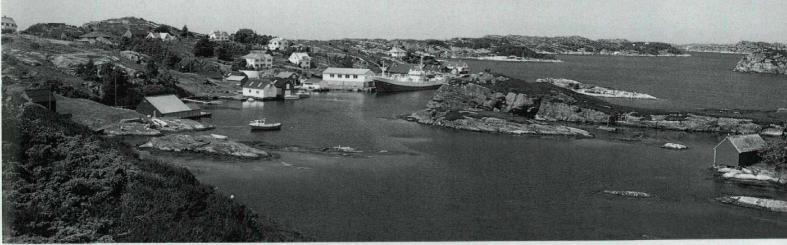
The outlook for sustainable development and its implications for Europe beyond the year 2000

t their last meeting, which was held in Oslo in 1994, the European Ministers responsible for Regional Planning recognised, inter alia, that democracy, social peace and understanding between different peoples increasingly required to live together can be lastingly achieved only in a context of tolerance and social justice directly linked to development that is evenly spread throughout all areas. Any growth should respect the right of future generations to a good-quality environment, and current well-being must

not be achieved at the expense of our future living conditions and those of generations to come.

Natural resources should not be considered as free commodities in unlimited supply; the value of the natural resource capital should be taken into account in all decisions on major investment projects and in all spatial planning and management decisions.

T. Bassi



C. Hamm

Editorial

The essence of regional/spatial planning is to learn from experience and take a long-term view on the future - in order to guide the decisions of today. Short-term concerns all too often drain our ability to act on long-term challenges. The Brundtland Commission set in motion a process to put long-term priorities on national and international agendas.

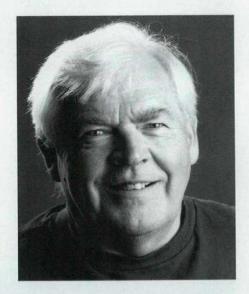
In the preparation of the 10th European Conference of Ministers Responsible for Regional Planning (CEMAT) and at the ministerial conference in Oslo in September 1994, it became evident that the countries of Europe are committed to promote sustainable development through urban and regional planning. In fact, regional spatial planning should be used as an important precautionary instrument for curbing urban sprawl, combatting pollution and unsustainable use of natural resources. My impression is that we are under way for putting Agenda 21 into practice. All local governments should have their own Agenda 21.

There is a need for a holistic approach to urban and regional development policies. This means that we have to balance the economic, environmental, cultural and social development strategies, within the limits set by nature and the needs of future generations.

Europe is going through rapid changes as a consequence of widening economic integration and development of the countries in transition. These changes makes collaboration between nations more important. The economic situations, the living conditions and the approach to urban and regional planning differ at present much between countries. This presents great challenges, both for regional planning and for the environment. Our common ambition is to recognise and practise sustainable development as a fundamental objective for decision-making.

Urban and regional planning is an important tool in this European integration process. We need common concepts and strategies for urban and regional planning in Europe. This will be of help for the national, regional and local levels in their efforts to increase quality of life and contribute to more equal living conditions.

Public participation is a prerequisite for adapting the urban and regional planning to the diverse conditions in the different regions and local communities. It is necessary to introduce new values and perspectives into the planning process. For this reason it is essential that the experiences of both men and women are taken in the planning process, i.e. to encourage and take initiatives



to increase women's participation in regional/spatial planning.

The Council of Europe has an advantage compared to other international organisations, that it brings together nations from all of Europe, and that we all participate in the discussions and agreements on the same level, whether the states we represent are large or small, old or new. It is my belief that the Council of Europe and the CEMAT have a unique position as an open forum for developing concepts and solutions that are useful for all nations in the years to come.

The policies for sustainable development have to be implemented both at international, national and local level. To succeed in our efforts, we have to reach a consensus on the necessary actions for change, respecting our differences in conditions. The challenge from the 10th CEMAT is to put the good intentions of the resolutions into practice:

- at international level: to foster transfrontier urban networks in order to strengthen international co-operation for a sustainable development in urban regions;

- at national level: to foster co-ordination and co-operation in urban regions, to promote cross-sectorial responsibility for a sustainable development based on the "precautionary principle" and to draw up guidelines with regard to environmental considerations in urban planning;

- at local level: to encourage measures to increase the physical quality and the quality of life in urban areas and to undertake pilot projects to plan and develop urban transportation systems based on environmentally friendly principles.

The work programme for the next inter-session of the CEMAT approved by the ministers at the Oslo conference continues the forecasting and studies already started on the challenges for regional/spatial development in the whole of Europe. It is my belief that this programme will enable us to better understand our common challenges in Europe and give a valuable contribution to the progress for a sustainable development in Europe.

Thorbjørn Berntsen Minister of the Environment Norway

Sustainable management of rural areas and preservation of a natural environment

Rainer Krell, Tage Michaelsen, and Freddy Nachtergaele

uman activities, past and present, affect the European landscape to such a degree that the concept of pristine natural ecosystems brings up romantic, and most often foreign, images. However, increased awareness about the importance of biological diversity, and the risks involved in monocropping, clone cultures, and a more or less sterile production environment, has made farmers interested in maintaining a more natural landscape.

These demands will in most cases involve changes in present and future design, production and management practices, but also, in many cases, the restoration of old river courses, flooding former wetlands, regeneration of natural vegetation, reintroduction of extinct fauna, etc. In most cases, however, this does not lead to "repristination", but more often to the restoration or conservation of landscapes as they are perceived to have been in very recent history, i.e. the past couple of hundred years only.

A major opportunity of restoration is presently available due to a decrease in the need for farm land for food production and due to the restructuring in central and eastern European countries.

European agriculture towards the end of the 20th century

Historic developments, agricultural supply markets, (over-) regulation and subsidisation have led to market and production patterns and farm structures which are unsustainable both financially/socially as well as environmentally.

The symptoms of unsustainable practices and encroachment from urban and industrial areas are showing in ever-increasing levels of soil loss, water consumption, ground and surface water pollution, etc. and result in decreasing production potential, a serious problem in view of the size of future world populations. 25% of arable land (220 million hectares) in Europe is affected by soil degradation, of which 1 to 2 % seriously. Deforestation and overgrazing are the main causes, but pollution through agricultural mismanagement and industrial activities is not negligible either. In a region generally favoured for agricultural production by climate and soil conditions, the cost to society of this unsustainable over-production is growing so high that for example some drinking water standards (for NO3 and pesticide residues) are being adapted to fit exceeding conditions rather than vice versa.

Changing land values, market competition and increasing product diversity and specification require expert integration and management beyond the means of individual farmers who remain dependent on natural fluctuations of climatic and biological conditions. Market trends, but also trade agreements and competition - which can be adapted and regulated and environmental needs - which do not respond well to regulations - need to be integrated into a larger concept and model for land use management.

To assure the necessary income security in an increasingly two-tier farm structure full-time vs. part-time farmers - the farmer, in addition to being a primary producer, will increasingly become also a provider of a variety of services (between farmers, to the community, to tourists, recreational users and for nature and landscape conservation). To prevent overburdening of an increasingly more complex profession necessitates a sophisticated technical and administrative support system.

The non-polluting, resource-improving organic farming concepts applied to individual farms need to be extended to larger areas like whole landscapes in order to accommodate the highly varied agricultural product market demands and the integration of natural landscape elements. An example for such

enlarged conceptual approaches in resource management are the changes in water and water pollution management from management of individual streams to that of whole watersheds.

Research needs to change from a primarily production-oriented focus to one that gives priority to environmental and health benefits while maintaining or, of secondary importance, increasing agricultural production. As a result, agricultural land use will include and support preservation of natural environments rather than limit it and will allow through local and interregional cooperation the connection of wildlife habitats essential for effective nature conservation.

Rural land use in transition economies

The changes in rural land use in transition economies, while still in their initial stages, are just as diverse as the type and progress of the restructuring exercises and economic recoveries of the different countries, i.e. from basically no changes over revitalisation of small- and medium-size family farms to redistribution and abandonment of land, including land speculation, over-exploitation of forest resources, delays of private activities due to lacking clarification of property

25% of arable land in Europe is affected by soil degradation



Ponhart

rights, lack of financial and technical support for agriculture etc. But also new protected areas have been created and environmental awareness and the activities of environmental NGOs are increasing while experiencing similar conflicts of interests as their western neighbours. In the best cases, most up-to-date technology and planning tools are available and reforms are adapted for soonest integration to the European Union - not a guarantee for sustainable land use.

The most profound effect on future land use and on the effectiveness of conservation and sustainable practices will come from the redistribution of ownership. Where ownership is still separated from the user, conservation will be hardest to motivate; where land is divided into very small parcels, the same will be difficult for economical and labour limitations. Some of the paralysing lack of financial resources is also directly linked to the unresolved ownership clarification (e.g. for loan collateral).

The sudden need for private capital and lack of financial sources has led to the wholesale of inventories in some countries, stripping the existing farms of the most essential stocks, leading to bare survival scenarios in which farming decisions cannot be based on sound market and environmental requirements. In less extreme conditions, farm workers turned landowners do not have the technical know how to deal with the complex spectrum of farm management activities, nor can they resort to an adequate advisory service.

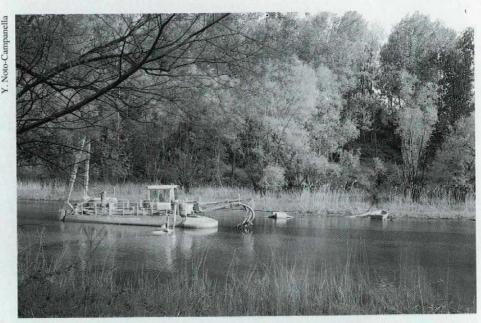
The reduction of agrochemical inputs and the necessary restructuring of the rural sector has created an opportunity for the introduction of low or no-chemical input farming, i.e. improving on the methods that are being used by necessity. Since in many regions the rural restructuring is still in progress, there remains a chance to integrate environmentally sustainability without repeating the mistakes of the westerns neighbours.

While current lack of experience in policy and technical implementation are a barrier, later mitigation, costly for rich industrial countries, will be financially unobtainable in economies which have to struggle for survival for many years to come.

Renaturalisation activities

The "renaturalisation" of the environment may include the restoration of swamps and wetlands, previously brought into agricultural production through drainage and stream channel works. Old river meanders can reduce the stream gradient and raise the water level, bringing back birds and aquatic life and landscape values of higher present value to society than the crop production foregone.

Recreation and integration of "natural or semi-natural" habitats connected to each other throughout an agricultural landscape are gaining recognition not only for increased landscape and conservation value, but also



Dredging

for increased agricultural production with less chemical inputs.

The increasing use of indigenous species in mountain forests as well as in the restoration of semi-arid lands is brought about by the recognition of their better long-term protective function.

Management of set-aside lands

Particularly fragile ecosystems should be protected or reserved for specific uses which do not threaten their uniqueness in terms of biodiversity, landscape or other. At the moment, such lands are treated in different ways in Europe, varying from benign neglect to intensively misused or mis-managed or subject to urban encroachment, as is the case in many coastal wetlands.

A very special case is the land that is presently being freed from agriculture, due to a change in the common agricultural policies of the European Union, which results in more fallow agricultural land. Changes may lead to a loss of landscape diversity and a considerably increased risk of bush and forest fires. This implies that fallow land requires a certain management level and input and should be planned in a rational and integrated way if it is expected to contribute to sustainable agriculture in the long term.

Outlook for the future

The challenges facing European farmers and other natural resource managers, as well as planners and policy makers, include relatively high production costs; complex societies with a variety of demands not only on the quality of products, but increasingly on the quality of production processes; less available land for intensive farming, and increasing demands on farmers and managers to produce environmental, recreational and other services.

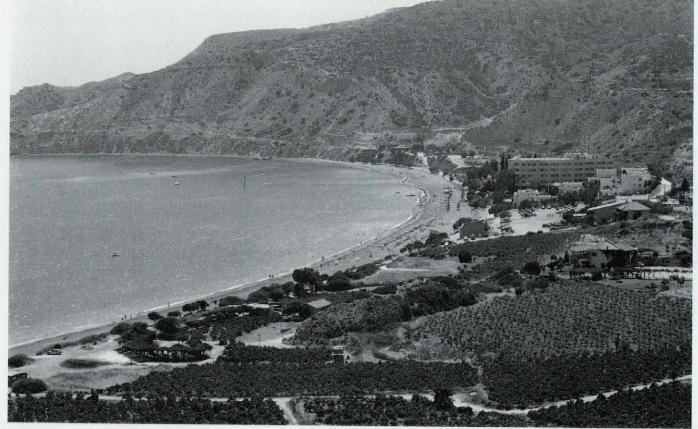
While short-term production gains are still possible through intensive methods involving greenhouses, automatised controlled environments, clone cultures and cultivars, pest and disease control, etc. it is increasingly understood that long-term sustainability has to be based on a philosophy of conserving biological diversity and resilient ecosystems.

It is therefore necessary that under circumstances such as in western Europe, where more than sufficient food and other agricultural production permits land to be set aside and natural ecosystems to be restored, the occasion should be used to (re)generate as far as possible the potential biological diversity and ecological balance of whole ecosystems. This is furthermore seen as a benefit to societies with increasing demands for natural environments in which to spend additional free time.

The international and even global debate on forestry and sustainable forest management is a clear indicator that a balanced approach to production and conservation and the satisfaction of different interest groups is not easily achieved. It is however essential that the debate is continued and accelerated to include all natural resource users and well informed stakeholders to formulate appropriate policies, legislation and implementation programmes.

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Coastal landscape, Cyprus

Socio-economic challenges for sustainable tourism in the Mediterranean Basin

Andreas Ashiotis

The Mediterranean Basin has been the womb where great civilisations of our past have been born, evolved and lost in the depth of history. In fact, one could suggest that the history of Europe in particular has been written along the coasts of the Mediterranean.

Even today, in an era of rapid technological evolution and development, when distances diminish with every year and information technology bridges the gap between the peoples of our world to form an integrated universal system without precedent in human history, the Mediterranean remains an extremely significant region of the world.

The Mediterranean has always been and remains till today a physical element which functions in contradictory ways; it links people with strong, albeit salient, bonds, but at the same time it divides an impressive variety of nations, cultures, economies and religions. Peoples living along its coasts have widely differing aspirations, expectations and lifestyles but they share uniquely a common destiny: the Mediterranean as a common lifesupporting element of nature, the future of which will define both directly and indirectly their own future. Depending on the chosen course of action, the Mediterranean Basin may sustain prosperity and welfare, or alternatively it might as well provoke protracted social unrest and conflict.

During the last forty years, the contemporary generations exploit the potential of the Mediterranean without any effective concern for the irreversible damage inflicted on the overall capacity of an extremely sensitive environmental system to support life in the future. Eventually, as a result of our priorities and choices, the Mediterranean Basin is facing a state of crisis.

Tourism and tourism-related activities and development might be considered responsible for many of the severe problems affecting sustainability in the Mediterranean Basin. For this reason, discussion on sustainable development in this particular region usually focuses on tourism and its environmental impact.

The impact of tourism on the Mediterranean

For the most part of this century, the Mediterranean has been an extremely attractive tourism destination and millions of Europeans have visited the region for holidays. This tremendous influx of visitors over the years has contributed to the economic development of coastal areas of Europe and to the overall welfare of local communities. The significance of tourism for the Gross National Product of most Mediterranean countries proves that tourism will remain an extremely vital service-industry which is especially valuable for national economies during periods of recession and high unemployment. At the same time, tourism has helped local populations to remain in otherwise poor coastal regions of the Basin, thus contributing to the demographic stability of many areas in Portugal, Spain, France, Italy, Greece, Cyprus, etc.

However, over the last decade it is gradually becoming clear that the "blessing" of tourism has imposed on the Mediterranean environment pressures and stresses of an unprecedented scale and magnitude. Today, it is generally accepted that most Euro-Mediterranean countries are facing a paradoxical phenomenon, where an environmental asset (the Mediterranean Basin) has attracted tourism, and that simultaneously the asset itself is victimised through over-exploitation and misuse.

Environmental degradation due to overexploitation of the primary asset is the direct result of the drive to maximise tourist development and the immediate economic benefit generated by the influx of visitors. Nevertheless, other indirect effects multiply the overall impact on the Mediterranean environment.

Ribbon tourism development in the form of hotels, apartments, resorts, and second holiday homes stretch over hundreds of kilometres along the Euro-Mediterranean coast, transforming the unspoiled countryside of coastal regions into a continuous urban area. The very fast rate of these developments has not coincided in most cases with the provision of the infrastructures, necessary to support them (ie. waste and sewage treatment systems). Highways, airports, power plants and power lines, marinas, etc. have scarred what was previously perceived as the picturesque Mediterranean environment. Small fishing villages have been lost forever to be replaced by massive tourism settlements.

Natural resources are being over-exploited beyond their capacity to regenerate in order to satisfy increasing demand for new tourism-related development. Golf courses, amongst others, add up to the excessive consumption of huge quantities of fresh water, which is a particularly scarce resource in this region. Environmentally sensitive areas of high value and their fragile ecosystems are affected by the influx of visitors and development pressures.

Adverse socio-economic phenomena are increasingly alarming in many countries. Local labour forces are unable to support tourism, even where this sector attracts a work force from agriculture and industry, weakening further their respective competitiveness. The resulting dominance of tourism in local economies is not good news for any country, especially when it has been proven that tourism is not as reliable a sector of the economy as it was perceived to be a few years ago.

In many cases massive tourism exceeds the social and cultural carrying capacity of local communities and resulting social tensions and changes in the traditional social structures and balances are warning indications which should be monitored as early as possible.

The widening of regional imbalances is another indirect effect of the rapid tourism-related development of coastal areas. In most Euro-Mediterranean countries the economic benefits from tourism tend to be confined within a relatively narrow coastal zone, while the hinterland remains mostly underdeveloped and neglected. In addition, a significant proportion of the young and productive population of these hinterland areas moves to the coastal zone to work and live.

Developments on the southern coast

Sustainable development in specific environmental units (to the extent that this identification is relatively feasible), and especially in "closed" and vulnerable systems like the Mediterranean Basin, is an objective which needs to be pursued irrespective of national boundaries or any other delineation. Regardless of any effort made or action taken by any state or group of states in the European coast of the Basin, sustainable development in this region will not be achievable without an equally strong commitment by countries on the southern coast of the Mediterranean.

This presumption is the foundation of the interest and particular attention that Europe should give to the conditions which affect the ability of countries on the southern rim of the Basin to adjust their policies, priorities and overall orientation towards the common objective.

This particular aspect of sustainable development in the Mediterranean Basin is not the subject of this article. However, it should be noted that the issues at stake are very significant indeed, especially when evaluated within a broad and long-term perspective. Demographic developments and migration trends, the performance of national economies and relevant problems, socio-cultural balances and the development prospects in these countries should be studied in depth in order to formulate a set of policies and incentives which will encourage them to join the common effort towards safeguarding that this development will be sustainable in the future.

Sustainable tourism development

Past experience should be used to define the new approach towards sustainable tourism development in the Mediterranean. Generally, tourism development should guarantee the integrity of all non-renewable resources, while remaining economically viable in an increasingly competitive international market.

Tourism development should be perceived as part of an integrated spatial and environmental system, which needs to be well balanced and interwoven to other major activities, development and the policies for protecting the natural habitat. A decisive priority should be allocated in the upgrading of existing facilities for adjusting to the changing needs of the consumer, whilst the excessive consumption of scarce land, especially in environmentally sensitive areas, should be discouraged.

The local population should be encouraged to participate in an effective manner in the planning process related to tourism development.

A permanent dialogue with local people will make them an equal partner in the implementation and management phases and will minimise social cost.

Euro-Mediterranean countries should initiate an intensive dialogue and co-operation process between themselves and with countries on the southern coast of the Basin in order to co-ordinate:

- the development of complementary tourism products;
- the transfer of experiences on the negative effects from tourism in order to avoid repeating past mistakes;
- the formulation of a common integrated tourism strategy, which should ensure the sustainability of all future developments.

Eventually, it should be realised that massive tourism and all related development along the Mediterranean coast affect permanently the viability of the Mediterranean Basin itself as a nature resource and its potential to support the peoples of the region. All future developmental choices, therefore, should consider the environmental and social carrying capacity of localities and the Basin as a whole as the one most significant and indeed crucial criterion for regional planning decisions.

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Mass tourism and outdoor leisure activities

Jan van der Borg Paolo Costa

Tourism and recreation have grown over the last three decades from activities practised by the happy few to phenomena that interest billions of people all over the world. Factors that have contributed to this explosive growth are, among others, the rise in disposable income per household, the risen mobility and an increased availability of leisure time. As a consequence, the tourism industry is expected to become the biggest industry, in terms of employment and turnover, by the change of the century.

Continuous expansion

Nowadays, an impressive number of cities, regions and even countries are socially and economically dependent on tourism. Together with the growing relevance of the industry, however, the question has risen whether this continuous expansion is compatible with the physical, social and economic environments that host the visitors. This article tries to give some answers to this crucial question.

Tourism and excursionism

To answer the question, some peculiarities of tourism and outdoor recreation need to be

discussed. The first is that either the "vacation" consumed by tourists or the "excursion" consumed by day visitors are composed products. They are made up by a large number of goods and services. Although it is impossible to know exactly and in advance which goods and services are going to be included in a vacation or in an excursion, since this will very much depend on the tastes of the individual consumer, one can identify several components that generally form the tourism products: the trip that is necessary to leave the daily living-environment, and the destination of the trip. The destination in its turn consists of attractions, the primary products, and of supporting services and facilities, the secondary products. Secondly, the "visitor" does not exist. Many different market segments can be identified, each with very distinct tastes and consumption patterns. These different visitors, though, may still choose similar destinations.

Excess demand

The primary product of a destination is a mix of natural, cultural and artificial resources. A large part of these resources is public, and thus not "priceable", and almost all are unique and hardly reproducible. In the absence of a market price, the use of those resources depends merely on the accessibility

offered to visitors. This may lead, and has in fact led, to situations of excess demand. Negative externalities, such as congestion around the resources, pollution and "wear and tear", are then becoming evident. The continuity of the resources is compromised. It has been widely recognised that stress from tourism does not only concern natural environments (national parks, mountain regions, etc.), but urban environments (heritage cities, for example) as well.

Intervention and planning

In such extreme situations, intervention is unavoidable. The task of the planner is to guarantee sustainability of tourism development. In the case of emerging destinations, the newcomers on the tourism market, this means stimulating recreation and tourism to a level so that it effectively contributes to the local economy. In the case of congested destinations, it implies the management of visitor flows, in order to respect the destination's tourist-carrying capacity and keep the benefits as high as possible, but reduce or even remove the negative external effects. Concentrations of visitors in time and space must be avoided, spreading visits over the various seasons and offering incentives, for example in the form of alternative routes, to visit not yet congested areas. Moreover, tourism must be preferred over excursionism.

The answer to the question posed before may therefore be affirmative, but only if tourism development is not left to improvisation, but carefully planned. The concept of sustainability, which may be seen as a reflection of this carefulness, contains a minimum and a maximum limit to development; not too few, but neither too many visitors. It is not difficult to show that, in the long run, sustainability premiums all the interested parties. By safeguarding the integrity of the resources, the quality of the visitor's experience, the continuity and profitability of the tourism firms and the livableness of the destination for the residents are all safeguarded. What is much more difficult is to raise the awareness about these issues among them.

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Women's participation

Anna Lindh

The importance of society's formal and informal power structures for equality between women and men has been increasingly stressed in recent years in Sweden as well as in other European countries. Equality objectives cannot be developed in isolation. They must be integrated and main-streamed into all areas of policy and society.

Women and men - time and space

Traditional statistics usually exclude unpaid housework maintaining the notion that these tasks are of marginal importance. In 1990, the Government commissioned Statistics Sweden to conduct a representative time-use study covering both labour market work and unpaid housework. It showed that the time women and men spend on work (the total of paid and unpaid work) is about the same. Given a certain amount of paid work, though, Swedish women's total work load exceeds the total load of Swedish men. Men seem to have better chances of coming home and resting after a long day at work. For women there is a great deal more unpaid work still to be done.

Unpaid housework amounts to 96% of labour market work. Comparing time spent on different tasks shows, for example, that the "unpaid cleaning sector" is larger than the paid banking and insurance sector and the "unpaid shopping and errands sector" is larger than the building industry.

Women's daily living conditions are on the whole a great deal more complex than those of men (as long as men are unable to or do not want to take part of housework). Women often have to co-ordinate several commitments (work, care of children, care of parents, shopping) and fit the pieces together into a well-functioning daily time-schedule.

The division of responsibilities and duties corresponds to a spatial division. Men and women often spend their weekdays in separate spheres. Furthermore, their working places are physically separated from their homes and children. The transport factor is crucial in this puzzle.

The need for transport

The last decades have shown that physical infrastructure tends to be manifested in large-scale investments and in zoning of functions, for example high-speed motorways and supermarket areas. This trend will make everyday life more difficult for women (or for anyone without access to a car) who are to combine their possibilities to support themselves and be independent with the care of children and the elderly. Transport problems are also one

of the contributory reasons why women migrate from rural areas to cities.

Statistics tell, for example, that men in the Stockholm region, on a daily basis, travel by driving private cars on an average of two to three times as much as women, while women make purchases more often than men do on their way (Stockholm County Council, 1992). Data from 1994-95 concerning the whole of Sweden tell that 50% of men's journeys are made at the wheel in a car compared to 28% for women (Statistics Sweden, The ongoing survey on travels and travelling patterns). Today some 30% of Swedish cars are owned by women. (Statistics Sweden, Transport Studies, 1995)

If car traffic has to be reduced to save the environment and to avoid intolerable congestion in cities, the question should be asked whether it is fair that women should resign from the convenience of personal vehicles to solve the transport problem of men. We have to ask ourselves how we meet the need of women and, indirectly, also the needs of men, children and the elderly, in questions of infrastructure. And we have to combine this question with the needs for sustainable mobility. Transport studies have not been particularly oriented towards women's travel demands although the methods and the data are generally available. The interrelationship between family responsibilities and transport needs is a key issue.

Sustainable development

Gender awareness and the need for sustainable development are issues closely linked together. There is a need to shift the focus of development discussions to the household perspective and to the everyday life in order to reach sustainability. Both from a gender point of view and from the point of view of sustainability there is a need to change standpoints from sectorised and centralised solutions, based on the assumption of the unlimited availability of resources and the infinite capacity of nature to receive our waste.

Women in regional/spatial planning

Decision-making and planning processes at large have not involved men and women on equal terms and do not reflect collective decisions of men and women.

Unawareness in the planning and building sectors in this duality has caused an unnecessary gap between needs and outcome. This gap has to be identified, recognised and analysed by both parts, among women as well as men.

Several international conferences, among them a seminar arranged by the Council of Europe in Sweden in 1994, have pointed out the need for



women's participation in planning and building. Some important conclusions are that the empowerment of women in decision-making processes must be ensured and that the awareness and integration of gender dimension in urban and regional planning must increase.

There is a need for initiatives that would help bring planning with women as well as with men into reality. Such an initiative is, for example, the recently started network "EuroFEM", hosted by the Ministry of the Environment in Finland during the first three years.

Efforts in this direction must go on continuously. The world conference of the United Nations on Human Settlements, Habitat II, in Istanbul in 1996, offers an important opportunity to integrate a gender perspective into the planning process for better homes in an urbanising environment. Of particular importance are commitments to dismantle all existing inequalities for women regarding access to land and financing, but also to promote women's democratic right to participate fully in the shaping and maintenance of human settlements in harmony with the environment.

Another perspective

Another perspective is needed. Women should be recognised as an integral part of regional/spatial planning and not only take part in terms of influencing the process as a marginal group. They must take full part as representative of more than half the population. We have to stress that planning and managing our environment cannot be done on behalf of women but with women. Moreover, sustainable development must be based on everyone's needs and requires changed attitudes.

Participation of women is needed on all levels to improve the quality of the environment that responds to the shared values of men, women and children.

Anna Lindh Minister of the Environment S-103 33 Stockholm Sweden

Population trends and regional development

Denise Pumain

Regional planning, the organisation of services and environmental management should be carried out with due regard for population trends and the demographic patterns of towns and regions. Knowledge about these changes, in so far as they can be forecast, can be used to devise appropriate policies to anticipate and correct trends which may lead to regional imbalances. The regional planning problems of today have less to do with the growth of the population of Europe than they do with changes in its behaviour and its mobility, which has become more selective in terms of both direction and time.

The population growth rate is now very low. It generally remains firm at less than 0.5% per year and in some countries it occasionally just drops into the negative. In a surprisingly short space of time the drop in the birth rate has brought the behaviour of the southern and then the eastern European countries into line with northern Europe, leading to a reversal of former trends. Even though some northern European countries now have more children per woman on average than southern or indeed eastern European countries, the gap is still quite narrow and probably has few repercussions in the form of regional imbalances. Furthermore, in spite of the still relatively high pressure of demands for emigration from eastern to western Europe, most countries pursue restrictive immigration policies. The influx of foreigners, which the example of Germany over the last decade proves can have a significant effect, is now tending to level out. Therefore there is no reason to expect that there will be any major upheavals in the relative population sizes of the different European countries.

Gradually ageing

The European population, like that of all developed countries, is now gradually ageing. People of 60 years of age or more now form about a fifth of the total population and by the year 2020 they may amount to a quarter of the population, whereas the proportion of individuals under 20 years of age will have changed in the opposite direction. However, although, at least as far as the western and northern countries are concerned, there is a downward trend in retirement age, particularly as a result of high unempployment, the health profile of elderly people is tending to improve. It is likely that the demands on regions which specialise in providing facilities for the elderly are going to increase. This process, which is enhanced by selective migration according to age between regions but also between countries, goes hand in hand with sometimes excessive specialisation on the part of the regions concerned, particularly those in coastal areas. In order to diversify the host areas, a start could be made by, for example, providing appropriate facilities in the vicinity of well-equipped mediumsized towns. Facilities for the very old are becoming more vital as families break up and should be devised with a view to providing easy access to towns instead of being placed in isolated areas.

Behaviour patterns

Clear differences persist in demographic behaviour patterns in different parts of Europe: marriage and the birth of the first child occur at an earlier stage in eastern Europe than in western Europe; infant mortality remains higher in the East than in the West; the work force participation rate of women is higher in northern European countries, where it exceeds 40%, than it is in southern European countries, where it just reaches 30%; divorce, which is becoming increasingly commonplace, is more frequent in Scandinavian countries than in southern Europe, However, observation of recent developments does seem to indicate that the behaviour patterns of Europeans are tending to converge. These behaviour patterns have considerable implications for regional development because they mean that households made up of only one or two people have become more common and the number of large families has declined. The changes in the composition of families and the break-up of marriages and their growing instability lead to increased demand for small flats, particularly in town centres.

Move towards the urban periphery

This trend is not always noticed because at the same time improvements in living standards have made it possible to satisfy the demand for more space through the construction of larger flats and above all through the spread of private houses, generally built in rural areas on the outskirts of towns. In the large majority of cases, this recent residential mobility of the populations of Europe has led to a spectacular decentralisation of urban populations, resulting in a decline in the number of people living in town centres and a spread of the population into areas which remain accessible but are often very far away. There was reason to fear that this trend could lead to the demise of the typical European town, densely populated, compact and centred on a rich architectural heritage, to be replaced by the north American pattern of sprawling residential suburbs. However it would seem that what is occurring is not so much an exodus from the town centre as the victory of more illustrious activities

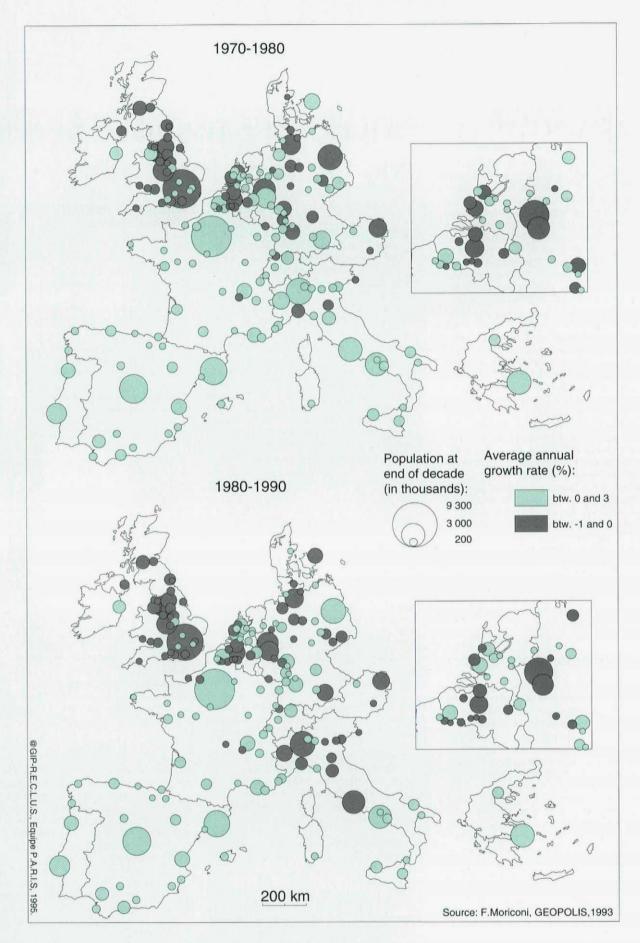
over the residential role of the town centre, which, although full of history, is still easily accessible and highly appreciated. Therefore, in spite of the fact that it devours space, the move towards the urban periphery should be encouraged, particularly around small and medium-sized towns, in so far as it helps to bring new life to rural areas at little cost. This phenomenon should be monitored more closely around larger urban agglomerations where it can lead to over-long commuting and a deterioration of the environment under the intense pressure of the habits of urban dwellers.

Social phenomena

The recent change in urban population patterns clearly illustrates that urban planning problems in large agglomerations are not confined to dealing with physical phenomena such as congestion and pollution. A trend is emerging towards increased segregation of often disadvantaged minority groups, resulting in the formation of pockets of urban poverty where all the conditions are amassed which can lead to marginalisation, exclusion, delinquency and crime. Although this phenomenon is less pronounced than in other parts of the world, it is a cause for concern. These problems can only get worse with time if the public authorities do not take vigorous action to combat them. To improve the quality of the physical and social urban environment, politicians should attempt to encourage functional and social co-existence in all areas.

"Metropolitanisation"

Over the last two decades migrations have helped to a degree to restore the balance between the central regions, which are generally more densely populated and richer, and the outlying regions, and between northern and southern Europe. Our modern age is marked by the globalisation of the economy and the growth of links established by international organisations such as the European Union, encouraged by the transition to an information society. It is likely that this change benefits the largest cities in a process known as "metropolitanisation" in which leading edge technologies and the best qualified people are gathered together and selected in major cities. It is true that these cities are in the best position to take advantage of developing international links. The increased presence of women on the labour market and the ever more widespread tendency for both partners in a couple to work offers a further inducement for the population to concentrate in big cities which provide a large and diverse labour market in which there is more chance of two different career aspirations being fulfilled at the same time.



Growth of European cities from 1970 to 1990

The map shows that there is a degree of stability in the demographic growth rate of European cities. The losses undergone by the cities of Britain and the north of Europe gained northern Italy during the period from 1980 to 1990. Environment management also prompts us to consider the impact of the consumption of space by uncontrolled urban sprawl discernable in the growth of satellite towns around the outskirts of major agglomerations.

Threat to survival of small and medium-sized towns

In western European countries there is a danger that this process will widen the qualitative gap between the major cities and small towns, particularly where the age, education and income of their populations is concerned. In eastern Europe where the potential for urban development remains high owing to former restrictive policies, it is likely that cities, and capital cities in particular, will grow more noticeably. The power of their administrative bodies will tend to underpin the dominance of big cities in which all the decision-making centres and the major industries are accumulated. This urbanising trend poses a long-term threat to the survival of the small and medium-sized towns which represent a heritage unique to Europe. In this continent with its dense and long-established population, in which the urbanisation process took place so gradually, the average distance between two towns of more than 10,000 inhabitants is around 13 kilometres compared with 48 kilometres in the United States. For an equal population, Europe has many more small and middling towns than America, where the urban population is much more concentrated. The top thirty American agglomerations have a larger population than the top thirty European cities, and the population of New York, the largest city in America, is three times greater than that of Paris or London. To preserve the unique character of its dense seedbed of small towns, Europe should try to prevent the imbalances which are brought about by metropolitanisation from becoming too large and divisive, for example by pursuing policies which accelerate the spread throughout the regions of improved accessibility.

Anticipate population trends

However, in order to be able to devise regional development policies which anticipate population trends we would have to be able to predict developments in mobility and regional economic growth more accurately as well as the impact that any measures taken are likely to have. Questions relating to the environment raise quite different issues in the highly populated urban regions which form Europe's backbone from those raised in the sparsely populated regions of the north or the medium mountain ranges, which are in danger of being abandoned. Similarly, the growing trend towards segregation, within cities or between the regions of one country, between rich and poor, between the majority and less well integrated minorities, or even between the elderly and young adults, requires regional development policies which anticipate the changes which are currently taking place.

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Impact of population trends: the German forecasts

Ralph Baumheier

erman reunification and the dramatic changes in central and eastern Europe have meant that all past forecasts of population trends in Germany have very quickly been overtaken by events. The Federal Ministry for Regional Planning, Building and Urban Development has therefore commissioned the Federal Research Institute for Regional Studies and Planning to draw up a new regional development forecast for the period up to 2000-2010. The aim of the exercise is to forecast the key parameters of regional and spatial development. The central element of the prognosis is a regional population forecast, on which other forecasts will be based in the longer term (concerning the number of households, working-population and labour-market trends, housing and building developments).

The forecasts show the following main trends:

- Contrary to previous forecasts, the population of Germany will not fall slightly by the year 2000, but will increase by approximately 4 million (approx. 5%).
- Population trends in the two halves of Germany are in sharp contrast to each other. The increase in Germany's population is the result of migration inflows affecting only former West Germany (a good 9% increase) and the Berlin region. In contrast, the population in all regions of former East Germany (except Berlin) is falling.
- Mobility between the regions of western Germany is set to remain more or less constant in the long term. East/west migration is continuing to fall, and will stabilise at around 115 000 per annum by the end of the nineties.
- Further decisive factors are the changes in the age structure of the population, there being a fundamental trend towards an increase in the proportion of elderly people and a marked decline in the number of young people in the eastern half of the country.
- The baby-boom generation of the sixties will continue to have a decisive influence on the demand for housing throughout the nineties.

These developments fit into the overall pattern of population trends for the European Union, which show population growth up to the year 2000. The Eurostat forecasts vary between growth of 2.3% and 5.8%, from a starting point of 343 million inhabitants in 1990. Here again, the key feature is the continuing ageing of the population, whose impact will be felt more strongly after the turn of the millennium.

Impact on land use and infrastructure

Especially in the states of former West Germany, the medium-term population forecasts do not offer any prospects of relief on the regional labour or housing markets.

All the signs are that the trends observed in terms of the development of built-up areas will continue and that further sharp growth will take place in the nineties. The decisive factors here include medium-term regional population trends, growth in the number of households, regional employment trends, including structural changes, and general trends in the transport sector.

In the medium term, the sharp increase in traffic levels expected will also lead to further growth in built-up areas. The already rapid growth in traffic levels has been given added momentum by German reunification and the coming together of Europe's nations. The improvement and expansion of transport infrastructures which is needed to cope with this situation should be seen in close connection with often expanding, extensive growth in building developments, ie the use of more and more land for housing and economic activities.

Alongside the regions with development pressures, however, there are other areas, especially in eastern Germany, which are affected by a process of contraction, ie by sharply falling population figures and further declines in employment levels, whose medium-term effects could be to undermine the stability and proper functioning of their regional infrastructure.

In conjunction with the individual states (Länder), the Federal Ministry for Regional Planning, Building and Urban Development has drawn up a regional development policy framework, which sets out guidelines for future regional development. Priority is given to the structural development policy objective of decentralised concentration. Regional planners thus have the task of putting decentralisation strategies into practice in a consistent manner and helping to bring about the geographical and social integration of areas with differing regional population trends.

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Framework and constraints for sustainable, equitable regional planning

Tarcisio Bassi

Sustainable regional planning consists in a multi-disciplinary, comprehensive approach, which is based on in-depth consideration of all the many interrelated problems the future holds for us and leaves political decision-makers with a number of options, a variety of strategies for achieving chosen objectives in the most balanced way possible.

One of the main features of sustainable regional planning is that it is long-range, forward-looking, in other words it is geared to the future.

Without some idea as to our future life and that of our children or the structure of the Europe in which we wish to live tomorrow, without a world-embracing outlook, absolutely essential in a context of increasingly intense globalisation, and without coordination at European level it is not conceivably possible to lay the strong, lasting foundations that will enable tomorrow's Europeans to face international competition and the many challenges in store for Europe.

Yet the aim should not be to attempt to predict the shape of things to come in ten or twenty years' time on the basis of various trends, but rather to try to propose realistic strategies allowing the attainment of general objectives of benefit to Greater Europe as a whole.

There can be even less question of programming our future way of life, as of now, along strict, unchangeable lines or, worse still, trying to force tomorrow's reality to fit into a framework defined today.

We must not delude ourselves into believing that prosperity and peace are ever-lasting and that it will be possible to achieve truly balanced development throughout Europe. Economic, social and cultural imbalances exist and always will, but we must prevent these disparities from causing Europe and the rest of the world to be plunged headlong into a series of conflicts of all kinds.

In recent years Europe has undergone significant political upheavals, which have called into question our current way of life, which we thought was eternal and transposable to the world as a whole, and shaken our confidence in its lasting nature. Gradually the realisation is dawning that this is not possible.

The concept of sustainable development has recently been given much media coverage, especially in connection with the Rio Conference of 1992. This concept is based on:

- the need to take into consideration not only the rights of the men and women of today but also those of the men and women of tomorrow, implying that present generations have a responsibility towards future generations;

- a broader view of the quality of human life; and
- a balanced distribution of development between regions, not only on the European level

While taking care of the present, we must give thought to the future, and there must be no fear of raising difficult, sensitive issues such as the future impact of world population growth or of the ageing of Europe's inhabitants; excess consumption of depletable natural resources, which currently allow rapid but unsustainable economic development; the future cost of various kinds of pollution; the repercussions of different cultures and lifestyle concepts prevailing at world level on employment in Europe (with its corollary the problem of unemployment); the demands of international competition, which favour concentration of economic, industrial and farming activities in those regions offering the highest short-term profitability, etc.

The world is changing fast and problems are becoming increasingly complex, interrelated and global. It is necessary to take into account certain aspects of this globalisation of problems and their consequences for our daily lives. Most Europeans do not appear to be sufficiently aware of the situation.

A large number of sectorial policies exist. Taken individually they may seem fair and effective, but once integrated into a global context the same policies sometimes prove to be out of step with overall priorities, too partial, lacking in a medium-term outlook and, in the long run, quite inequitable for the community as a whole.

It is worth taking a closer look at some of these issues, since they all represent challenges which Europe will inevitably have to meet in the 21st century.

The world population boom

Over the last four decades the world has undergone unprecedented changes and their future consequences have probably not yet been assessed to the full. The world's population has never grown so fast, from two and a half billion inhabitants in 1950 to just under six billion today and a projected eight and a half billion by 2025. According to some forecasts global population growth is unlikely to level off before the end of the next century, when there will be twelve to thirteen billion people on earth; this figure is admittedly challenged but the most conservative forecast is nevertheless in the region of eleven billion.

The growth trend is very unevenly spread around the world; it is extremely strong in Asia, Africa and Latin America, but weak in Europe and North America. Europeans' numerical significance is inevitably decreasing; some years ago Europe accounted for about 15% of the world population, but by 2025 the figure should be in the region of 7%.

This uneven population growth is bound to result in migrations from the more populated, disadvantaged regions to regions and urban agglomerations in countries regarded as having more attractive economic prospects.

Even if this is a truism, it should be pointed out that at the same time the planet has not got any bigger, nor will it do so in future.

The first consequence of population growth is that there will be more mouths to feed. Although this can be done, there is no easy solution because, while it is true that there are surpluses of some agricultural products, the fact is that those who are hungry often live in countries that import such products and have little to offer in exchange. It is possible to raise agricultural yields, adopt more efficient farming techniques and to rapidly make food output suffice for the current population. But how long would this last and what would be the cost?

What would be the immediate effect on land, water and air? What would be the future, as yet imperceptible, impact on nature, on animal and plant life? Intensive monoculture can quickly result in desertification. The consequences of over-utilisation of maritime food resources are becoming obvious: the sea is



The problem of world demographic growth concerns us all

showing increasing signs of depletion. Deforestation, partly due to the search for new agricultural land, is interfering with certain essential functions such as retention of carbon and the slowing down of global warming. Animal and plant species regularly become extinct. Clean energy sources are fast diminishing, earlier than expected. The unprecedented demographic growth also has many other repercussions.

A growing number of people must also be housed, provided with medical care, educated and given an occupation, and it is a known fact that satisfactory solutions have not yet been found in any of these fields for the existing population.

Turning a blind eye to these hard facts, a large number of people believe that it is possible to achieve a significant improvement in the living standards of millions of people in many countries. But how? Whenever economic (agricultural and industrial) growth falls short of demographic growth the automatic outcome is a reduction in the average quantity of available goods per capita, and achieving worldwide economic growth on a par with demographic growth is already difficult.

Huge investments will be needed to ensure that the fundamental requirements of additional human beings can be satisfied merely to present standards.

The problem of world population growth is therefore not only a matter of concern for those countries where the population is booming. It affects us all, and will continue to do so in future. An appropriate solution must be found at world level. We cannot go on living as we do today, or as we did forty years ago, at a time when the space available for each individual is constantly shrinking. Are we aware of this?

Despite the moral issues raised by any proposal to master population growth, it would now appear that there can be no lasting solu-

tion, even on a European level, to many problems (poverty, social conflicts, migration, fairer distribution of wealth, protection of the environment, health care, crime, drug abuse, unemployment, etc.) if the world's population is not rapidly stabilised or at least if demographic growth is not brought into line with attainable, sustainable development of the resources needed to support life, a decent life for all the people of the world.

Where does the fair balance lie and how can it be achieved?

The free market and international competition

Technological progress is so fast that an increasing number of people are unable to adapt to the ensuing changes. Extremely poor population groups, unable to cope with modern life, are emerging within our societies. The same phenomenon can be observed at world level in the least developed countries.

Globalisation of trade in goods and services and the very sudden changes it can cause in the relative prosperity of national or regional economies affect our present way of life and production system, and will continue do so in the medium term. Yet, it is not easy to predict the extent of such repercussions, since past trends shed scarcely any light on the future in this respect.

The constant drive to liberalise international trade (on the pretext that in current-day consumers' best interests it is necessary to establish a global market based on prices determined purely by productivity and efficiency criteria) forces all countries to exploit to extremes their specific situation, their established advantages, in order to avoid being trodden underfoot by their competitors. How can these constraints be reconciled with the principles of sustainable development, which are founded on opposite values? Promotion of trade and economic growth should have a

balancing, stabilising effect on society, but this requires acceptance that the current equilibrium is the right one. The haves would say it is, but the have-nots would disagree.

Social measures (health care; old age pensions; working hours; protection of children, women and old people, and so on), which are so disparate around the world and account for such heavy expenditure in Europe, unavoidably have a significant impact on final production costs. The same applies to the environment protection standards imposed in certain countries. Moreover, organisation of political life in general and of public services differs widely from one country to another. Depending on the level of efficiency attained and the system's complexity, sophistication and scope, the financial consequences in terms of the end cost of goods produced by the public and private sectors vary.

In the circumstances is it reasonable to believe that the European economy will for many more years be capable of withstanding, without a minimum degree of protection, the international rivalry of States that apply rules far different from our own? Those countries which produce at lowest cost, regardless of conditions, will corner export markets open to international competition.

Where products are of equivalent quality, consumers no longer hesitate to buy the cheapest, without worrying about its origin or the conditions under which it was produced, forgetting both their claims as productive members of society and various noble social and humanitarian ideas. How can low-cost consumption of goods produced in regions where the rules and regulations governing industry are very different from those we apply be reconciled with safeguarding jobs and working conditions in our part of the world?

It is to be hoped that a balance can be struck between the world's regions, currently so very different, by improving the situation in countries which lag far behind in the field of social protection. However, this is bound to be a very slow process and is only possible once population growth is stabilised in these regions. In the meantime, it is inevitable that competition from countries with low labour and environment-protection costs will lead in the world's rich countries to an increase in unemployment among those workers who are unprotected or who are the least competitive or specialised (that is the least able to adapt rapidly to technological change of any kind). In the prosperous, industrialised countries it is to be expected that there will be an increase in income disparities between workers, depending on the extent to which their jobs are threatened by international competition.

In a global free market system, relocation of many firms to countries where production costs are lowest is an irreversible phenomenon. This is the outcome of the ongoing combat to be the most competitive.

After this brief analysis, the following questions can be raised: - Should production of certain goods be abandoned in Europe simply because imports are now available more cheaply? Before prices of imports are compared with those of European products, should they not be inflated by the addition of a portion of the cost of solidarity between the (sometimes "protected") working population and the unemployed? Is it wise in the long term to cease certain types of production activities in Europe, despite the difficulties inherent in launching or relaunching any activity and our awareness that progress and increased competitiveness can only be achieved when production is continuous?

- For how long will the rich, over-privileged countries be able to bear expenses (especially public expenditures) that are superfluous, excessive or unproductive (by comparison with the situations prevailing elsewhere) without protecting their economic activities, which in the long run cover these expenses?

It must be acknowledged that Europe continues to benefit from certain advantages (advanced technology; better organisation and higher productivity; the fact that some rival production sites are far distant; reputation, tradition, quality and know-how, and so on). Yet all these advantages are fast crumbling away into nothing. Our growth is losing steam, a normal occurrence when technology is reaching the limits of what can currently be assimilated, as would appear to be the case to some extent in Europe and the United States, and when relative opulence has blunted our competitive edge. Exchange rate adjustment is indeed a possible solution, but it is not usually one that eliminates major structural disparities on a lasting basis.

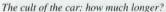
Contrary to what is frequently stated, there is reason to doubt the permanent nature of a free market between regions that are so different and its overall benefit in the medium term for consumers and producers in the world's "prosperous" countries.

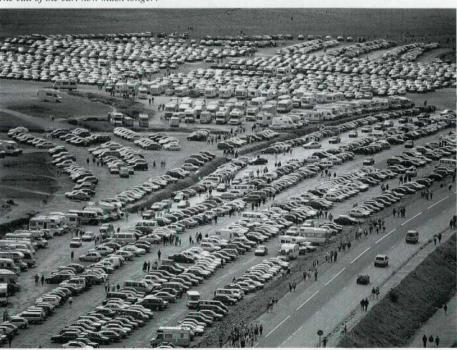
The standard and quality of life world-wide

Over the past forty years development of the "western" life-style has been based on economic growth, technical progress, the search for immediate profits at all costs and improvement of living standards, without much thought for the future consequences of these trends.

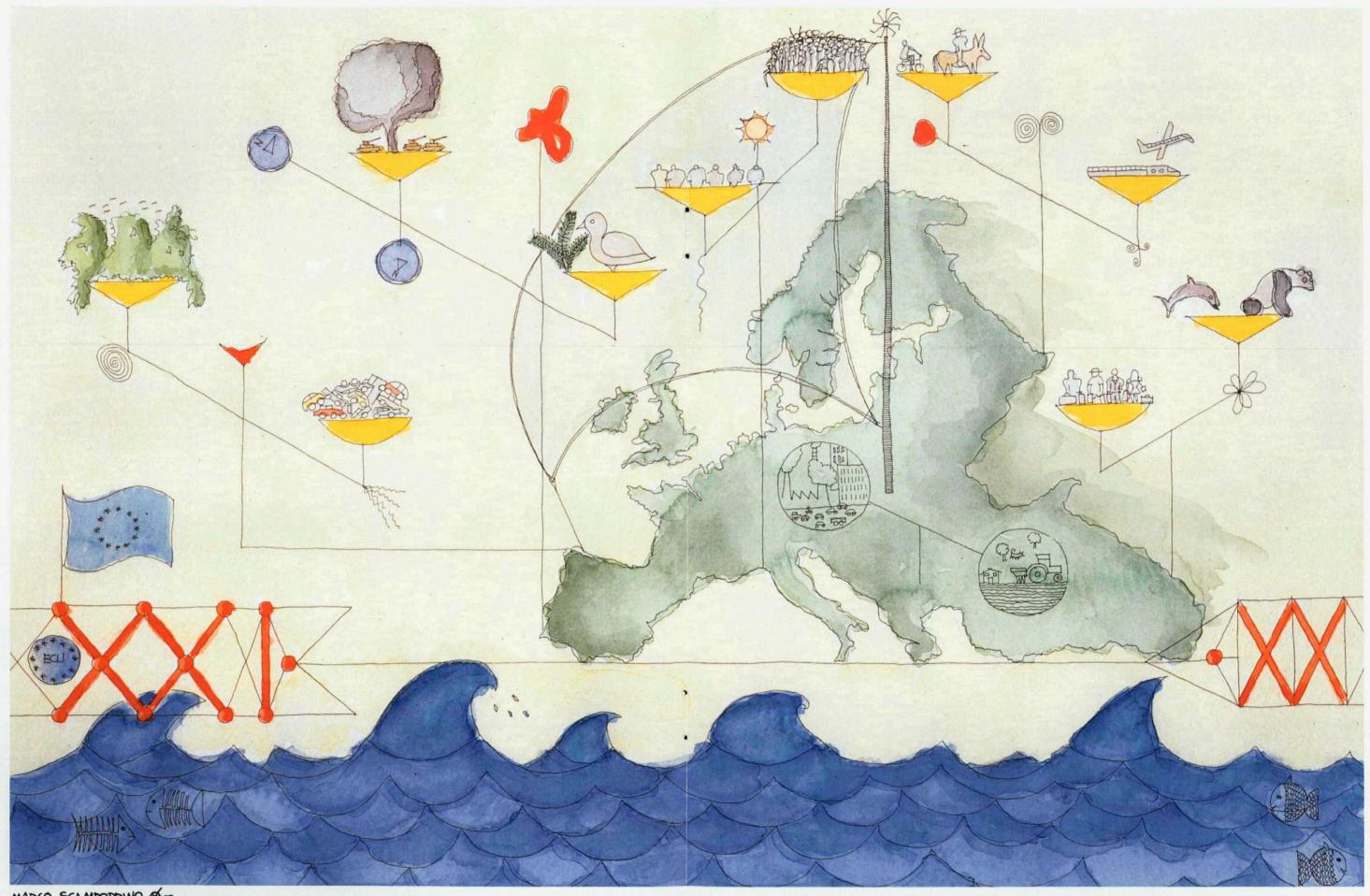
Yet, the standard and quality of life, as conceived by the post-war generations, have all too frequently evolved in opposite directions. According to some studies, the overall result is that we are currently only just breaking even. Economic progress has been paid for, or will have to be paid for, in environmental (over-utilisation of natural resources) and social terms. The conclusions of these studies are open to challenge, but it is nevertheless true that we bought part of our past wellbeing and consumption on credit and continue to do so today. The time is approaching when we will have to settle our debt for many of these "unpaid-for" rights of all kinds, and we do not know how to transform them from rights that we take for granted into real rights, not even in the rich countries and for a limited number of human beings.

Despite the favourable trend noted in many "prosperous" countries, where living stan-





b. boisson



MARCO SCAMPORRINO \$45

"If you don't know your destination, no wind is favourable" (Seneca)

dards are highest, people are scarcely satisfied with the standard and quality of life. But is it really possible to improve living standards in Europe and world-wide (material comforts, leisure, social protection, health care, etc.) and at the same time achieve progress in the quality of life, which for many of us means a lifestyle closer to that which existed forty years ago in a number of respects (quality of the environment, pace of work, family life, relationships within the community, etc.)?

In only forty years, dissemination of information, especially in visual forms, has made an astonishing leap forward. Almost everywhere in the world television shows pictures of the rich countries, in which consumption is presented as one of the driving forces of the economy. How then can one not have the impression that a large part of the world's population, if not all of it, is striving to attain a life-style comparable with that of the "privileged"? The image conveyed by our society, the hope that it nurtures in the poor, the continuous hammering with individual rights and the rights of the community, not to mention duties, lead to the immediate rejection of any criticism of the current system based on medium or long term considerations. Yet this level of consumption and over-utilisation of natural resources, of which the benefits are currently enjoyed by less than one quarter of the world's population, cannot be extended to all of the earth's inhabitants.

What standard of living might feasibly be in line with the planet's capacities at the beginning of the 21st century with a population of six billion (or more) human beings? What would be a realistic standard of living projection for eight and a half billion people by the year 2025?

Where does the balance lie?

Those who now live in plenty, even if defining "plenty" or "not enough" is a very subjective exercise, must significantly change their production and consumption practices both for their own sake and for the sake of others, in order to safeguard our planet's future.

Protecting the environment and natural resources

The constant deterioration of the environment is principally attributable to the fact that both rich and poor countries have adopted forms of production and consumption that are not sustainable. Our current standard of living, whatever it may be, has been achieved partly by drawing too heavily on our natural assets. The balance between human activities, on the one hand, and regeneration of certain natural resources, on the other hand, is very much in jeopardy.

Before being implemented, any sectorial policy should include an in-depth analysis of its immediate and future impact on the environment and natural resources, and the results

should be taken into account when decisions are made. However, we must bear in mind that it is often very difficult from a political standpoint to make protection of the environment a top priority.

The standard of progress desired by the majority of the population, constant demands for improvements in current living conditions and idealistic objectives for future ways of life can only be met at the cost of damage to the environment, and nature is already under increased pressure as a result of the rise in the world's population.

There are many known remedies for the different kinds of damage done to the environment. It is possible to put them into practice on condition that we are prepared to work harder, to increase investments in means of prevention and to scale down our way of life, which leads to over-utilisation of energy resources. Initially, the only outcome would be to halt the deterioration of the quality of life.

How can the general public be made to understand that in order merely to have clean air and water, a variety of plant and animal life, undamaged monuments and less illness, we must all be prepared to invest a greater share of our individual labour and resources on a permanent basis? Working harder to benefit from natural surroundings comparable with those which existed thirty years ago is not an idea likely to be popular with many people. In this case, how can we arrive at a more accurate economic approach incorporating the cost of protecting the environment in policy decisions relating to other sectors? Over the past forty years our consumption of many natural assets has exceeded that of all

The modern attitude is to concentrate on immediate results and to avoid looking too

earth. Is anyone concerned about this?

the earlier generations that inhabited the

deeply into the complex, indirect relationships between nature and human activities. Yet, tomorrow's environment will be determined by measures that we take or fail to take today.

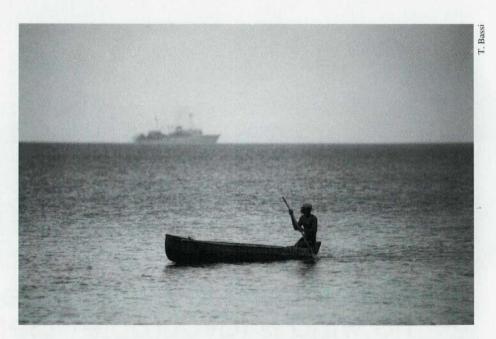
Sustainable development strategies accord special importance to safeguarding natural assets, but the importance of this objective will always be weighed against many other priorities.

Where does the fair balance lie between the need to exploit natural resources to meet the present population's requirements and the duty to safeguard those resources, at least in part, for future generations? Humankind thinks that it can permanently replace the natural equilibrium - fragile, merciless and tending to evolve either very slowly or very suddenly - with a human equilibrium based on science and in tune with human interests and rights. Is this not very presumptuous? Caution and good sense should govern any activity with long-term repercussions, the extent of which cannot easily be determined.

Sustainable, equitable development

The World Commission on Environment and Development has outlined proposals for equitable, international solutions to the world's main problems, which at the same time protect the poorest and weakest and take into consideration the rights of future generations.

Nowadays major decisions in the economic, ecological, agricultural, social, demographic, technological and other spheres can no longer be taken separately; all of these areas are closely interrelated and contribute to a fragile, unstable equilibrium. Sustainable development does not mean that this equilibrium must be rigidly maintained and that policies in all fields should be immutable, but rather that the



overall outcome of processes of change of any kind must be another acceptable equilibrium. No improvement or progress in a given field that is achieved to the detriment of others, sacrifices the future to the present or benefits part of the planet at the cost of the rest can be regarded as a true step forward.

Proposed changes must also be compatible with the time needed for human beings to adapt to them. All living things can pursue their existence in a wide variety of circumstances, but the pace of change, with all its ensuing consequences, must be a "natural" one.

Such changes are admittedly not easy to bring about. They necessitate a global understanding of problems and involve decisions that can prove difficult if the too often utopian, contradictory ideas we defend are to be made a reality.

Until less than fifty years ago we could allow ourselves to pay little heed to the consequences of economic and industrial development. Such development was fairly gradual and relatively sustainable. Since that time human beings, on account of their numbers, their use of technology in many different forms and the considerable changes in their life-styles, have disrupted natural equilibriums to the point where the risk of doing the planet irreversible harm is such that urgent joint action at world level is justified in order to sustain future progress and development in accordance with the needs of humankind and the laws of nature.

Today's decision-makers have the hard responsibility of defining the large-scale projects that will shape the world of tomorrow: the degree to which it will be a natural world, how populated it will be, how technological, selective and artificial, to what extent social and human considerations will prevail in it.

The many problems sketched out above will weigh heavily on our future. But the immaterial side of things must also be taken into account. If the cathedrals, the Arc de Triomphe and the pyramids exist, this is partly because our ancestors had ideals: faith, the home country, the family, glory, tradition, and so forth. Many of these ideals, which perhaps too closely resembled duties, have been thrown to the wind without being replaced by anything other than rights, of which there are perhaps too many.

A future without ideals or effort can only be sad and dull. Peoples without ideals are inevitably overwhelmed by those who believe in something.

Europeans place increasing importance on their environment, and this concern will have to be made a priority. However, it will then be necessary to accept the consequences since other regions' priorities are completely different and performance, in particular economic performance, is affected by these priorities. Europe's spatial planning policy will have to combine in a coherent manner all of the measures necessary to give Europeans the surroundings they desire while enabling Europe to strengthen its position in a world where, willy-nilly, the strongest dominate and always will.

To this end, all the States in Europe will have to agree on general objectives for the future and be prepared to co-ordinate their national strategies in the light of these shared objectives. It may prove necessary to rethink, amend or strengthen existing decision-making structures while at the same time being more daring than before in opening up to all European citizens the debate on the main problems presently confronting Europe and being prepared to revise, if necessary, certain guiding principles that were of relevance in the past but lack relevance for the future. Any significant measures adopted must also respect each State's and/or region's special characteristics and take into account the subsidiarity principle, under which public responsibilities should preferably be entrusted, in general, to the authority closest to the community.

This approach affects Europeans' current way of life and there is much reluctance to follow it as, taken individually, human beings are often egotistical, set in their ways and concerned above all with the immediate future and their own personal interest. It can only be successful if the general public is informed of it and understands it. The need is therefore to heighten all citizens' awareness of these overlapping problems and involve them in decisions relating to the future.

Any European regional-planning policy should rank among its top priorities the social and spatial cohesion of the countries of Europe, the quality of their citizens' lives, sustainable development in phase with human well-being and Europe's continued importance on an international level.

Politically, it is necessary to avoid situations where certain regions in Europe and certain population groups less able to adapt to modern trends fall too far behind in their development. Efforts must be made to maintain and improve the living conditions of the populations of rural, disadvantaged regions, not only to avoid further rural-urban migration, but also to ensure that these populations continue to fulfil their essential role in protecting nature and keeping our planet alive.

Some unfortunate experiences and the economic recession have partially undermined the credibility of forecasts and plans made in the past. Yet, more than ever before, there is a need to anticipate the future and to attempt to define objectives for Europe as a whole and the strategies enabling those objectives to be reached.

Tomorrow's Europe, the Europe that Europeans apparently want, can only be achieved if we change our current way of life. Our society, in which we have acquired rights and

well-being on credit must evolve into a more responsible, more sparing society with greater emphasis on solidarity between generations.

Europe must neither close in on itself nor expose itself unnecessarily to a form of global competition based on values and life-styles far different from our own.

But we are perhaps making a huge mistake in believing that future generations will make the same choices as us, attach the same value to what we consider important or want to live in a world like ours. Would we want to live in the world that existed a century ago? Yet it was a more natural world!

Too many decisions are based on the past whereas they should be made for the future. The future is above all a matter for young people. Let us allow them to speak out about their own preferences, since tomorrow they will have to face the consequences of the decisions taken today.

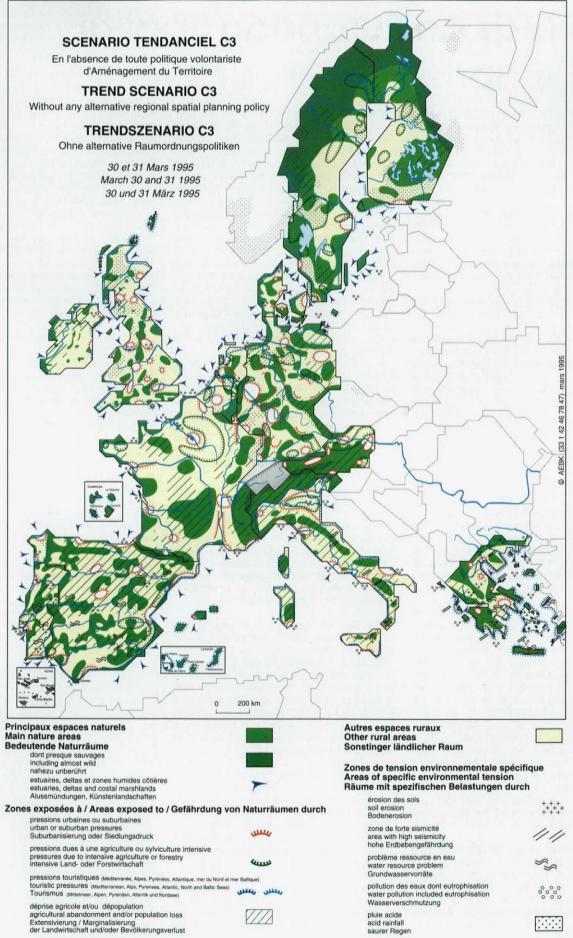
The Council of Europe is the ideal forum, both politically and geographically, for providing a coherent, pan-European synopsis of the different views held by the individuals and institutions with a say in how Europe is organised. Debates within this forum lead to conclusions which weigh diverging, or even opposite, interests in a level-headed, realistic manner and can serve as guidelines for the major decisions to be taken so that the Greater Europe of tomorrow is capable of holding its own in the world stakes and finding comprehensive, permanent answers, from which all Europeans can benefit, to the many challenges that face Europe today and will face it tomorrow.

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SCHÉMA DE DÉVELOPPEMENT DE L'ESPACE COMMUNAUTAIRE EUROPEAN SPATIAL DEVELOPMENT PERSPECTIVE EUROPÄISCHES RAUMENTWICKLUNGSKONZEPT



Towards an European Spatial Development Perspective

Bernard Robert, Claude Marcori

or the last few years, those involved in formulating the Community's regional policy have been endeavouring to devise a reference framework so that measures to stimulate growth in areas currently experiencing economic and social difficulties can be better targeted, while backward areas continue to receive help. Thus the Community's member States, in conjunction with the European Commission, have devised a European Spatial Development Perspective (ESDP).

This new approach is needed to ensure that support is not spread too thinly over too wide a range of measures and to bring the various European sectoral policies further into line with national policies.

Consistency and convergence

The latest measures in respect of transport infrastructure, while they accurately reflect the requests of member States, do not ensure that the various regions concerned will catch up in social and economic terms, chiefly for want of any genuine vision at European level. In the circumstances, how can priority measures be determined, how can investment be systematically reduced in areas where it has reached saturation point, and how can overconcentration be avoided and priority given instead to investment in geographical areas which need to restore a balance, if only in the longer term? There are other examples that have a bearing on the very principle of the consistency of European policies. At the moment these policies lack a reference framework. Such a framework would not define the posers that member States would transfer to European institutions, but rather would establish a common view of what the Community regions should become. This approach is being tried out first in the European Community member States. It is desirable that it be extended to other European countries in the very near future. The Conference of Ministers Responsible for Regional Planning (CEMAT) provides an excellent forum for discussion and exchange. It would be possible to seek to harmonise regional planning policies in all member States, while at the same time making Community policies more consistent.

Drawing up the ESDP

There are three useful sources of material for drawing up the ESDP:

The first draws on the principal guidelines for regional planning in three specific sectors:

- favour a more balanced and polycentric urban system;
- provide equal access to infrastructure and knowledge;
- manage carefully and promote the natural and cultural heritage.

The second sources are the Europe 2000 and Europe 2000 + Reports by the Commission, which identify in particular the various indicators available from the Eurostat database. These reports are very well documented and address the whole problem by analysing in detail the current situation in the Community. The Europe 2000 Report is based on a comprehensive assessment of European regions. It remains essential for the purpose of analysis, in particular in respect of economic and social cohesion and sustainable development.

The last source is the work carried out by each country on the prospects for social and economic development and their regional planning implications in the short, medium and long term.

The guidelines established under the Greek and German presidencies reflect the main planning principles and represent a very important framework for further inquiry. However, it has not been possible to apply them to specific areas, to judge how consistent they are with one other, or to consider how they could be implemented.

Long-term forecasting and planning differ greatly from country to country and reflect specific approaches, with varying degrees of progress depending on the economic and institutional contexts. It is therefore difficult to fit together all fifteen pieces of the Community puzzle. Before such work can be integrated at a European level there needs to be harmonisation. The value of this approach is that it makes it possible to appreciate different sensibilities and different ways of judging regional planning measures. This could be the basis for organising the collaborative work needed for a common selective approach and for drawing up a European Spatial Development Perspective.

The approach to be taken

Nevertheless, even if the material is there, transforming it into a development strategy is not easy, for the policy-makers in each country have to agree on the initial approach to be followed in order to determine measures of

European interest which complement national measures and confer legitimacy on a shared conception of regional planning. This approach could be three-fold:

- firstly, identify more clearly how European regional planning currently operates in economic and financial terms;
- secondly, use scenarios, either a trend scenario to indicate strengths and weaknesses, or a positive scenario to co-ordinate measures to counter the harmful trends observed;
- thirdly, implement transnational regional planning schemes, as a genuine experiment anticipating certain measures provided for in the Spatial Development Perspective.

How Europe works

Statistics aside, it is vital to understand Europe by considering how communications (in the broadest sense) interact with the urban fabric. Initially, two elements have to be considered: the central area and the outer areas.

- the central area covers the two large catchment areas (Paris and London) and the highly urbanised areas of Northern Italy, Germany, the Benelux countries, northern and eastern France and central Britain. The problems here are the need for tight-knit communications networks, the density of links and, in some cases, the complementary functions of towns. In this area, transport corridors are a great problem and could usefully be studied. It is quite clear that Switzerland should be involved in this study.
- the outer areas cover a much greater area than that covered simply by the peripheral regions, for example nearly half of France. The problem here is to connect these areas to the major urban centres, initially by means of infrastructures but, more importantly, by means of functional attributions, so as to avoid the classic and pointless centre/periphery debate. The problem of functions can be tackled by dividing Europe into large geographical areas: the south-west (France, Spain, Portugal); the north-west (United Kingdom and Ireland); the East (Germany's new Länder, Austria).

Dense communications networks are a problem that mainly affect rich countries. Proposals for coordinating and harmonising measures are needed here. For instance, the debate on the TGV (high-speed train) should not be limited to devising a plan;

consideration should also be given to how regions and towns can benefit from such infrastructure. Moreover, these ideas should be fine-tuned in order to distinguish between two distinct areas in this category, the area of the great old northern cities (London, Paris, Ruhr, Randstad) and that including the more southern cities (Frankfurt, Munich, Milan, Lyon).

In contrast, the need to connect outlying areas to large urban centres concerns, in varying degrees, countries that are less rich, and could rapidly lead to funding specifically earmarked for regional planning. Again, it is important to distinguish between areas which could benefit directly from the central core being extended and the more distant areas which have to base their social and economic growth on specific, existing assets, which complement the activities of the central core. Rather than make futile attempts to catch up in terms of Gross Domestic Product, these areas should be given a specific role within the European economic configuration and partnership should replace dependency; this presupposes, however, the capacity to determine which economic areas are capable of forming the basis of such a partnership.

Scenarios

Two scenarios illustrate this approach: the trend scenario and the policy scenario.

In the first, the idea is to identify, on the basis of the trends in each country, the underlying trend that will have emerged in the Community's regions by 2015. On the basis of indicators defined together, it should be possible to identify the strengths and weaknesses of the various regions in Europe.

In the second, the aim is to define key longterm projects at the European level, capable of reversing the trends observed.

Each country would analyse the consequences of the trend scenario and then determine the policy to be pursued. These efforts require a European vision, notably one that pinpoints the main transfrontier and transnational issues. Member States could then work together to gauge the regional consequences of the goals set. The aim would be to promote consensus around a shared but selective vision, focusing on projects of European interest likely to have a knock-on effect on European regional planning.

Transnational co-operation

Transfrontier regions are more receptive than some other regions and can therefore often establish co-operation between two or more countries rapidly. A first attempt was made when the Europe 2000 + Report, listing existing trans-regional studies, was drafted. Indeed, these provided an opportunity for experimenting and were the real forerunners of measures subsequently proposed in the ESDP and thus provided an assessment of the possible difficulties of implementation.

The trend scenario devised under the French presidency of the European Union was approved at the meeting of the Ministers in charge of Spatial Planning and Regional Policies in Strasbourg on 30 March 1995.

Trends and diagnosis

The trend scenario was based on a sectoral analysis of each key issue and made it possible to produce an initial diagnosis.

As a whole, regional planning in Europe is dominated by increased movement between economically prosperous areas, which has detrimental effects in terms of urban congestion, environmental pollution, rural depopulation, the absence of social cohesion and the increased cost of investment. This vicious cycle dictates the way all European planning currently operates, and makes it possible to take advantage of available areas which could be upgraded.

The problems presented by the mosaic of national territories are very different and it would be tempting to treat each one as a specific and separate case. However, this would be to neglect the European dimension and the potential complementarity between these regions, which must be exploited if lasting solutions are to emerge.

Progress with the fundamental issues pinpointed by the States in Leipzig in September 1994, namely sustainable development, economic and social cohesion and opening up to the world, are belied by the work on the trend scenario.

Sustainable development is hampered by:

- agriculture still based on the concepts of output and intensive farming;
- a revival which is difficult to channel towards extensive production;
- a transport policy which favours the road system, and clearly identified major roads at that;
- inadequately controlled urban growth.

Economic and social cohesion is undermined by the unification of markets of economies at different stages of development. In the circumstances, the mechanisms for transfer or compensation are of limited use and investment, for instance in transport, may even run counter to the aims sought (pulling the weaker towards the stronger). This is the result of an overly sector-based policy which overlooks the work that needs to be done to enhance vulnerable regions recently linked to the network.

Policy

On the basis of these trends, the second stage consists in constructing the policy scenario, identifying action likely to help reverse trends by adopting a specific European approach to certain problems. This operational strategy, undertaken by the European Union, is clearly one of a number of common sectorial policies with an unquestionable impact on spatial planning which need to be improved.

However, it should be remembered that this analysis marks the coming to maturity of ideas first introduced more than ten years ago by the Council of Europe and set out in the Torremolinos Charter of 1983. The exchanges and work coordinated by the CEMAT and the seminars jointly run by the European (Dresden, Prague) should make it easier to disseminate examples of best practice and help States to look beyond their national rationale in order to help forge this common and dynamic vision of regional development in Europe.

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Y. Noto-Campanella

Transport and sustainable development

Jack Short

ne of the ironies of transport is that it increases and reduces the quality of life at the same time-increases because it extends greatly the range of choices open to individuals as travellers or consumers and decreases because it results in accidents, pollution, noise and congestion.

Until recently there has been little questioning of the balance sheet. The benefits transport provides to individuals, to companies and to society have been accepted as being worth the negative consequences.

However, views are changing. Not everywhere - since transport systems are poorly developed in several countries and areas. Still, a growing number of countries and cities are seriously concerned about the adverse consequences of growing mobility. Some are saying that it is impossible to keep providing for demand. Many are admitting that the policies followed up to now have not brought the results expected. There is a consensus forming that there is a need for a new approach.

Similar problems

A recent report from OECD/ECMT European Conference of Ministers of Transport entitled Urban Travel and Sustainable Development illustrates what a new approach could be. The report is based on reviews of urban policies in twenty countries and over 130 cities around the world. It is striking that, despite the cultural, topographical and economic differences, the problems in cities and city regions are remarkably similar. Dispersal of homes, jobs and leisure activities is generating ever longer trips. People are travelling more to do the same things. Congestion is spreading like a cancer from cities to suburbs and also in time as morning and evening peaks lengthen. Air quality norms are frequently exceeded. There are serious health concerns, for example concerning ground level ozone or diesel particulates. Traffic dominance and intrusion blights entire neighbourhoods.

Many countries and cities recognise that the policies adopted to cater for ever-increasing traffic have not worked. New roads have attracted traffic and the congestion and pollution problems have not ceased. Public transport investment has helped but not to the intended extent, as new riders have been attracted more from cycling and walking than from cars. President Pompidou once said that the city must adapt to the car. Many now think that this has gone too far and that it is time to look at the question the other way round.

There have been successes. Pedestrian areasoriginally opposed by commercial interests are widespread and are pleasant and profitable. "Traffic calming" in specially adapted areas where traffic is restricted to 30 kph is growing. Historic towns have restricted vehicular access, preserving their character and improving the environment.

Policies and individual interest

Still the social and economic forces that lead to dispersed home and work locations, and to growing car ownership, use and dependence are based on legitimate wishes that cannot and should not be ignored. Policies that forget that people will act in their own interests are doomed to failure. Thus, exhorting people to use public transport is by itself totally inadequate. They will not do so unless there is some advantage, in time, in comfort or in cost.

External or environmental costs

Unfortunately, in transport the sum of the millions of individual decisions does not lead to a social optimum. A key reason for this discrepancy is that the price signals from transport are wrong. Real transport costs are in many cases much higher than the prices paid, due to "externalities" - effects for which there is no market. How to deal with these external costs is the most important single issue facing policy-makers at present. Science has provided better data on the environmental harm and on the monetary value. These values, however, are still not robust enough or sufficiently precise in particular circumstances to be a useful guide to policy measures. Internalising external or environmental costs will be a lengthy process and will rely on regulatory and fiscal instruments as well as improved information. Local, regional, national and international levels of government all have roles.

To rectify the distorted price signals the OECD/ECMT report advocates a steady long-term increase in fuel prices as part of a coherent and integrated package of measures. It is estimated (roughly) that even multiplying present fuel prices by a factor of four over twenty years would reduce vehicle kilometres by only 15% over present levels. Meanwhile CO2 emissions would be more than halved.

Governments have not yet accepted that such an approach is needed, arguing that there would not be public acceptance for such measures. What the report has done is challenge national and city governments to come up with alternatives that will lead to environmental improvements without unduly restricting mobility. So far there are no better answers

Well thought out packages

It is not only in cities that there are problems. Increasingly, long distance transport is being dominated by road transport. Across Europe it now has over three-quarters of the market and this share is growing inexorably at the expense of rail and waterway. Hostility to road traffic is on the increase, especially in the Alpine countries but also in Germany and elsewhere. There is a strong possibility of significant further increases as Eastern Europe develops and expands its trade. Policy responses are inadequate and have, as in urban transport, depended too much on exhortation and pious wishes.

The reaction between urban and interurban traffic is another concern. Frequently, it is argued that there is not enough capacity for interurban traffic. The reality is more often that there is sufficient capacity but it is filled by local traffic. Thus poor local public transport alternatives and uncontrolled planning lead to crowding of interurban networks and unjustified demands for more interurban capacity. This emphasises the important relationship between local and interurban traffic and networks.

Transport policy is facing fundamentally altered challenges. It is clear that the old clichés are no longer enough. Well thought out packages, with pricing measures at their core, are essential if transport is to fulfil its economic functions in an environmentally sustainable way.

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Land use and human health

Pierre Dubé, Philip Rushbrook and René Kersauze

n the European region two-thirds of the population (314 million) live in cities and towns. The urban areas are the places where environmental problems have the most effect on the quality of life and the health of citizens. In addition to urban traffic, the problems include rapid urbanisation without proper infrastructures in the south, inner city decay in the west, as well as homelessness, substandard housing, lack of facilities for recreation and inadequate municipal water, sanitation systems and waste disposal. The growth of cities and conurbations in the region leads to an excessive consumption of land and often also to the degradation of landscape. The actual urban forms and densities contribute to urban sprawl, reduce green areas and lead to the reduction of other environmental amenities adversely affecting living conditions.

Effects on health of environmental exposure are often serious for some vulnerable groups like youth and elderly people. Unplanned urban development, lacking basic public health services, has produced unsustainable urban development with the creation of suburban slums. Energy consumption is a critical issue in the human settlements sector; construction, soil removal and demolition produce roughly half of all production-related solid waste in many countries. Despite the fact that the significance of the human settlements to the national economy cannot be underrated, the improvement of housing conditions is a crucial social and health issue. The poor quality of the urban environment in

parts of the European region is a matter of growing concern, as evidenced by the recent UN Social Summit held in Copenhagen in March 1995.

A new integrated approach to environmental health

In response to growing concern about the state of the environment and health, WHO's Second European Conference Environment and Health in Helsinki, 20-22 June 1994, concluded to the necessity to develop a new approach to environmental health. Many organisations have also agreed that there is a need to promote a new integrated approach in the planning, building and management of human settlements in an effort to reduce energy consumption, pollution and noise, provide adequate opportunities for open and green recreation areas, preserve the landscape and cultural heritage and to help to realise the objectives of sustainable development.

In order to avoid problems of large cities and urban areas becoming unsolvable, there is a need to integrate environment and development including health, social and economic dimensions at the policy, planning and management levels. Enormous pressures originating from dysfunctions of urban areas are in the end reflected in people's health, well-being and quality of life.

During the last few decades, ways of conceiving health and lifestyle conditions have been subject to considerable changes. The explanation lies in the development and the use of economic and technological activities which are not always successful. The challenges for the cities of the future will be to incorporate technology, quality of life, health issues, urban culture and economic matters.

The urban and regional planners, like many others, are faced and somehow concerned with the changes in planning principles that are implied by broad principles such as "sustainable" and "ecological" cities. Like many others, sustainable development poses several key issues for the profession, in particular how to integrate health issues with overall regional or urban planning.

New trends for sustainable planning

Planning of urban and regional development will become more participatory with the involvement of local groups and communities and networking between cities and urban areas. Influential cities are changing the face of Europe, for example the areas surrounding Lyon (Rhone-Alps), Stuttgart (Baden-Wurttemberg), Milan (Lombardy) and Barcelona (Catalonia) are driving the process of European integration. They have formed a partnership that transcends national loyalties. Some experts believe the emerging urban economies are creating a new dynamism that will ultimately create an alliance that will consist of thriving city-states. Regions and urban areas need to be consciously planned to achieve the goal of sustainability. In particular:

- the planning of development and land use must be integrated with planning of transport, energy, water/sewerage and health and other infrastructures to minimise resource loads;
- the planning processes should become more flexible, innovative, open, participatory and co-operative.

Land use planning is more than one aspect of the municipal administration; it could contribute to implement real sustainable development but on the condition that the structure of communication and responsibilities are clear and coherent from the political orientation to the decision-making and management of any programme related to land use planning.

The question of how intelligent land use planning could contribute to a healthy regional/spatial planning should be addressed, in order to:

- promote an efficient land use;
- spread the renewable sources;





- prevent lands and resources being subject to destruction and abuse;
- -solve conflicting uses in accordance with socially acceptable priorities and criteria;
- reduce and prevent environmental pollution and health problems; and
- assure the promotion of sustainable urban development.

Strategic and preventive planning

The following principles are basic to implement a new integrated approach in regional/urban planning in order to avoid the negative consequences of land use on human health and to link environment with health issues in a more global perspective:

- interdisciplinary approach including environmental and health professionals and urban and regional planners;
- recognitions of inter-community dependencies, including economic, social and ecological issues;
- recognition of full costs of development, environment and health protection; and
- acknowledgement of the economical benefits resulting from health policies.

Prevention planning refers to a planning process, and an institutional and regulatory structure within countries, that gives stronger emphasis to prevention and public participation, to strengthen the ability to understand and act and to broaden the role of health professionals and authorities. In summary, to work towards a consensus, ie.:

- a planning process in which health concerns are given more attention to new industrial, commercial, agricultural, residential and infrastructure development aspects across sectors; and
- a structure of incentives and controls within which the economy can flourish and innovate while ensuring that short-term and long-term environmental health considerations are systematically taken into account and harmonised in the design, siting and functioning of new developments.

In order to develop a good and useful approach, different types of tools could be examined such as:

- policy tools ie. specific guidelines and indicators;
- planning tools ie. techniques and information for planning in transport, higher density residential housing or natural landscaping;
- information tools ie. urban or regional baseline data, periodic status audits and information directed to the general public;
- decision-making tools including land-use planning, environmental impact assessment, mediation skills, interdisciplinary teams, mechanisms to ensure greater public involvement; and
- education tools such as conferences, workshops, case studies, training, small group sessions directed towards professionals.

* * *

The new trend of making cities and regions sustainable will put great emphasis on

changes of policy and behaviour at all levels and on co-operation in urban/regional planning. Health and poverty alleviation will remain the basis of this new challenge because it is known that poor urban living conditions reduce the quality of life and damage the health of millions of people. Local and regional authorities will have to develop and implement municipal environmental and health plans. These should include strengthening intersectoral networks, strategies, health education, community involvement and assessments of health and environmental impacts from/on development. Roles and cultural changes are expected by the citizens, elected members, civil servants and industrial manager in developing a new (and improved) integrated approach to environmental health in cities.

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Disclaimer

This paper contains the personal views of the authors and does not necessarily reflect the views of the World Health Organisation.



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Sustainable urban development: the Ecopolis challenge

Jenneken Berends

Il around the world citizens, architects, engineers, planners, city managers and politicians are working on the questions and answers related to the development and implementation of policies aiming at a sustainable development of our cities.

A great deal can be learned from practical projects that have so far been realised in the recent past by inspired initiators. In the Netherlands these experiences and insights have lead to the design and development of a more comprehensive strategy for ecologically sound urban development which has been called Ecopolis.

In this article the Dutch Ecopolis strategy framework, the related strategic spatial organisation model and an example from planning practice are briefly presented.

Triple strategy framework

Lessons learned through practical projects have lead to a strategic framework for planning and management related to three fields: "flow", "areas", and "participants".

A true urban ecological approach should combine the three strategic objectives of "flows", "areas" and "participants". They need to be mutually supportive.

Flows

If we are striving for a sustainable common future, then we should not shift our problems to the neighbours or to future generations.

"Chain management" (life cycle management) for flows such as energy, water, waste and traffic then become accepted practice, focusing on prevention and source control rather than on supply and discharge only. This appears to be a difficult message to implement because even professionals have not been trained in linking goals of improvement or urban environmental quality with flow quality improvement considerations. Assuming responsibility for the function of an area as a link in the flow chain is what the "flows" field is all about.

Areas

The urban ecosystem is a living organism built in a particular location. Site qualities influence growth and differentiation processes. The quality of this habitat is closely linked with the way local ecological potentials of climate, water, soil and vegetation are maximised. The ecological qualities of the area may contribute to the identity of the urban system. Care for the environment should also contribute to the quality of the city.

We have to meet the challenge how to gear environmental differentiation related to various ages, lifestyles and activities, to the local ecological potentials. In order to put ecologically sound urban development into practice, strategies will have to be worked out for built-up and open areas (spatial policy).

Participants

The city is built for people, but the quality of the urban environment is also a result of human behaviour. In order to put ecologically sound urban development into practice, strategies will have to be worked out for various lifestyles and types of business. This can be achieved through target group policy and the round table approach.

This is an independent goal yet it is also a condition for achieving the goals set out under the headings of "flows" and "areas".

An example from planning policies

Ecopolis is not only a model. An example in planning practice already realised is the Morra Park in Drachten in the north of the Netherlands, a project which was also a demonstration project in the context of the Fourth National Policy Document on Spatial Planning.

In 1989, the idea for the plan, an initiative of the Municipality of Smallingerland and the Province of Friesland, was accepted as a demonstration project. This encouragement was the impetus to start construction in the spring of 1991. The plans were elaborated by a steering committee. The site on the south side of the town of Drachten was eminently suited to the environmental ambitions. The area of 14 hectares comprised a rural area with rows of tall alder trees bordering narrow waterways. Now it houses a small housing estate and business park.

Most conspicuous is the plan's environmentally sound approach to water management. The water system is a closed unit: no external water is allowed to the estate. Rain water is discharged into the ditches on the estate and carried to catchment ponds where it is purified by rush beds, instead of having it discharged into the sewerage system. A windmill is used to pump the water around the estate and through the rush beds. The less clean rainwater is first collected in drains containing oil separators sunk under the parking spaces at the end of a row of houses. Asphalt has been replaced by porous clinkers. There are no zinc gutters, or building materials containing CECs and HCFCs, and no PVC, PUR and PIR foams were used. Many of the houses have a sun lounge that provides half of the required heating.

Other Dutch municipalities pursuing Ecopolis goals are Breda, Zwolle and Dordrecht. All of them are considering the development of new eco-extensions bearing in mind the triple framework of flow management, site potential and participative planning.

Strategy of the two networks:

The strategy of the two networks is a general spatial strategy that emphasises the strategic role of water and traffic networks in trying to achieve a sustainable land use development. Both the water and traffic networks have an important potential to influence spatial planning. See accompanying illustration "Strategy

of the two networks: a model for the land use and spatial organisation of functions".

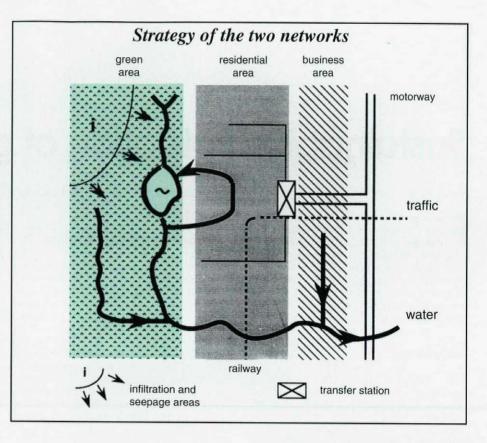
The traffic network can be seen as a carrier of "robust functions". It could serve as a backbone for the economic functions of manufacturing industry, trade and commerce, but also mass recreation and most types of modern agriculture - all highly dependent on traffic facilities.

The traffic network includes public transport and cycle track networks, providing conditions to reduce the role of motorised vehicles in areas that require tranquillity.

As a planning instrument, the traffic network can be very effective in influencing the more dynamic human activities, either by encouraging them or by prohibiting them.

The water network can be seen as a carrier of "fragile functions", like nature development and conservation and quiet recreation. By providing space for rainwater infiltration and retention, it may create conditions for the sustainable quality of green areas but also for sustainable drinking water production and for other ways of using ground water and surface water resources.

As a planning instrument, the water network, which includes brooks and rivers and protected areas for infiltration, can be very effective in influencing the optimal use of local ecological potentials. The quality of residential areas is dependent on its position in relation to both networks. It occupies an intermediate location between "robust" and



"fragile" functions. It reaps the benefits of having the facilities of the city centre nearby and at the same time having easy access to nature and recreation amenities. The ideal of "having both sides of one's bread buttered" implies an intermediate location between the two networks.

The "strategy of the two networks" can help create an urban form rich in contrast while offering an alternative to the traditional "red and green" models used in spatial urban planning, such as the classical "finger" and "lobe" models and the "polynuclear" model.

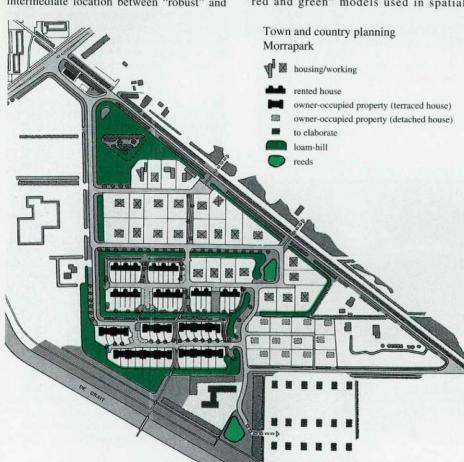
The three major advantages of the "strategy of the two networks" are:

- By shifting the emphasis from "red and green" and "black and blue" a sustainable spatial structure is created that is guiding the uncertain future land use development. Thus a tool for spatial planning is provided that enables us to implement the concept of "sustainable development".
- The water and transport networks are excellent links between "flow" and "area" management, thus providing relevant planning tools for ecologically sound urban development in which both processes and patterns are important.
- The two networks provide a basis for spatial planning focusing on rich contrasts rather than urban-rural polarisation that has become obsolete in modern urbanised landscapes with industrialised agriculture.

Land use planning is essential for the development and implementation of city-wide policies for sustainable development in which environmental, social and economic objectives and spatial policies are increasingly linked.

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Sustainable protection of groundwater

Rainer Piest

reshwater resources are unevenly distributed throughout Europe. Even in Germany, which has a cool and temperate climate, differing hydrogeological conditions and precipitation levels mean that wide variations exist, (see map). Water is a crucial locational factor in all regions and must be managed carefully, also with a view to securing adequate supplies for future generations.

Federal act

In Germany, the relevant regional planning activities are based on the Federal Regional Planning Act, which the individual Länder supplement with their own legislation and implement in the planning process. This framework legislation lays down the guiding principles of regional development - which also apply to water resources - and assigns it the task of conserving, protecting and developing natural resources, keeping regional planning options open in the long term and ensuring equally good living conditions for people in all regions. With regard to water resources, the Regional Planning Act, whose provisions apply directly to the federal authorities and to regional planning in the Länder, requires measures to be taken, inter alia, to conserve, protect and develop nature and the landscape and, in particular, natural resources, to protect the soil and water, to secure water supplies and to treat waste water and minimise its production. The legislation also requires account to be taken of the various types of interaction that occur, and stipulates that natural resources, in particular water, land and soil, must be used sparingly and with due care.

Comprehensive protection

In recent decades, considerable success has been achieved with major investments designed to protect surface water resources and keep them clean. In view of the direct links between surface water and groundwater and of the growing pressures caused by increasingly intensive land-use patterns and diffuse pollution inputs, comprehensive protection of the groundwater resources in all regions has also become more and more important. Groundwater should primarily serve as a source of drinking water that requires only a minimum of treatment before use.

The "philosophy" behind regional planning's comprehensive approach to the protection of water resources and the strategy for the necessary action and co-operation were worked out jointly by the Federal Government and the Länder and adopted at the Conference of Regional Planning Ministers on 21 March 1985 in the form of a resolution entitled "Protecting and securing water supplies".

The resolution briefly outlined the existing situation, and then set out the following principles for action:

- All usable water reserves must be secured in co-ordination with other requirements.
- The formation of new groundwater in water conservation areas must not be restricted and

impairment of the quality of groundwater must be avoided.

- Each region should base its further development primarily on its own water supply and take systematic measures to conserve the latter.
- The use of locally available water reserves should take precedence over the opening up of new sources of supply in distant regions. Integrated mains systems can improve the security of local water supplies.
- Long-distance water supplies should be used only if adequate reserves are not available or cannot be harnessed locally and care is taken to use supplies sparingly.
- Regions with surplus water supplies should keep these available for those regions whose own supplies are inadequate.

Two categories of area

The regional planning machinery used to implement these principles involves the Länder designating two categories of areas:

- "Water priority areas", covering water reserves of regional importance, where all uses incompatible with the priority of securing water supplies are ruled out.
- "Supply protection areas", covering zones from which water supplies may be drawn in the long term and where particular importance is therefore attached to this aspect when it comes to weighing up competing potential land uses.

Such areas are designated as regional planning objectives for securing resources in the long term and are thus binding on all the relevant authorities and public planning bodies.

The actual securing of groundwater supplies demands a whole range of additional measures. Although these may be integrated as policy objectives, they can only be implemented in co-operation with the relevant specialist administrative bodies and economic sectors (water authorities, agriculture, producing industries, transport), the aims here being, for example, to reduce the intensity of the use of water resources, avoid pollution inputs, identify and eliminate potential risks, and also ensure the sparing and quality-oriented consumption of water.

Long term efforts

These guiding principles - aimed at maintaining water cycles on a local scale, ensuring decentralised conservation and supply structures and minimising groundwater pollution are therefore shaping our long-term efforts to achieve sustainable regional development, for

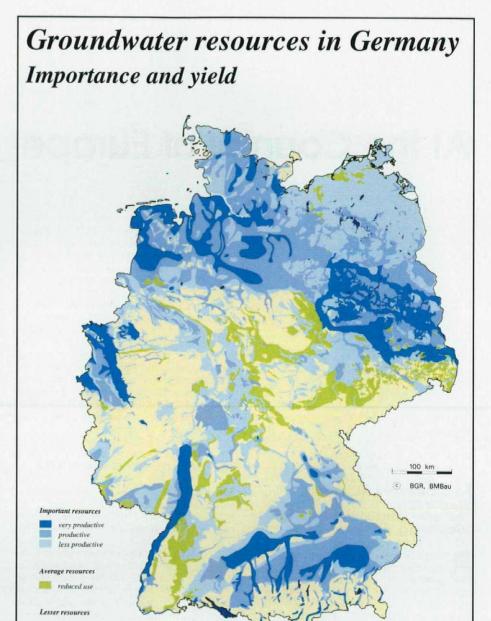
which provision is also made in the 1992 regional planning policy framework. The Federal Government and the Länder are currently working together on turning this into a framework for action.

Transfrontier co-operation

These strategic approaches always incorporate cross-border co-operation, as natural resources do not stop at man-made frontiers. They also tie in with the principles for the European regional planning policy, which the European Union Regional Planning Ministers agreed on in 1994. In terms of their content, they follow in the tradition of the European Water Charter of 1968 and are in line with the initiatives taken and recommendations issued by the Council of Europe's Parliamentary Assembly on the subject of managing and conserving freshwater resources in Europe. The strategy of securing groundwater resources through regional planning could also be a German contribution and proposal should the next session of the European Conference of Ministers responsible for Regional Planning (CEMAT), due to be held in Cyprus in 1997, discuss the European Regional Planning Strategy and lay down requirements for sustainable development in terms of water resources.

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Public participation

Rüdiger Dossow

The concept of regional planning requires logically, that a qualified decision is made on the actual and future use or management of a given space. How to ensure that such a decision will take account of its consequences in the best way? Regional planning decisions are made on vertical tiers of administration ranging from local authorities to an intergovernmental coordination at international level, like for instance through the European Conference of Ministers responsible for Regional Planning (CEMAT) for the 36 Member States of the Council of Europe. In addition hereto, a quasi horizontal distribution of the decision-making power is leading to the question of who should participate in an individual regional planning decision.

Public participation in governmental and administrative decisions is an important element of any democratic society. Regional planning should hence be "conducted in such a way as to ensure the participation of the people concerned

and their political representatives", as the European Regional/Spatial Planning Charter of 1983 formulates

fresh water

In many European countries, the legal regulations concerning regional and land use planning have undergone a discussion about the benefits and drawbacks of a wide public participation, the latter being generally regarded as positive. This was illustrated by the findings of a CEMAT Seminar organised by the Planning Inspectorate of the U.K. Department of the Environment and the Council of Europe on "Public Participation in Regional/Spatial Planning in Different European Countries" at Bath (England) in April 1995.

Individuals affected directly by a regional planning decision have the right to be informed and to object. Most European planning laws grant third parties or special interest groups at least consultation or deliberation rights. In order to enable people to participate, it is necessary to provide them at an early stage with the appropriate information, which includes the raising of an

awareness for the issues at stake for the individual as well as others. The same awareness has to be raised for the needs existent at the time a decision is made as well as in the future. Large-scale constructions, for example, will often bring disadvantages for direct neighbours, whilst satisfying needs of others. Short-sighted views, sometimes described as the "not in my backyard" approach, should therefore be avoided. Public participation will increase the time and expenses needed for the realization of a land use development, but this can be regarded as constructive, if it brings along a more thorough analysis of such development's effects. Excessive and frivolous delays will forfeit such benefit.

Bundesanstalt für Geowissenschaften und Rohstoffe,

Public participation in regional planning is therefore a necessary tool to find a widely accepted basis for land use plans as well as individual constructions. Structured in an effective way, it will help to come to more sustainable spatial development.

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At the Council of Europe



Parliamentary Assembly prepares for "An environment for Europe" Strasbourg, 8-9 June 1995

eing convinced of the importance of implementing a pan-European environment policy and of the opportunities offered by the major geopolitical changes that have occurred since 1989, the Parliamentary Assembly has taken great interest in the first two pan-European conferences on the environment, respectively held in Dobris (Prague) in June 1991 and in Lucerne in April 1993.

Driven by the desire to involve European parliamentary bodies and national parliaments in this process, it has also organised two pan-European interparliamentary conferences on the matter. The first (Vienna, October 1990) focused on East/West environmental co-operation, while the second (Regensburg, October 1993) dealt with the management and protection of the Danube basin.

In the context of the preparations for the 3rd Pan-European Ministerial Conference on the Environment, due to be held in Sofia in October 1995, the Committee on the Environment, Regional Planning and Local Authorities organised a conference in Strasbourg on 8-9 June which focused on the topics to be discussed at the ministerial conference on which European parliamentary bodies and national parliaments could make practical contributions.

The chairs of national parliamentary committees on the environment, industrial and economic affairs and agriculture were thus invited to Strasbourg to discuss the role of national parliaments in applying existing environment conventions, putting in place financial mechanisms to facilitate the realisation of specific projects decided or proposed by the ministers, stepping up dialogue with NGOs operating in the environment and business sectors, and guaranteeing the general public access to information and, in some cases, enabling them to take part in decision-making.

The conclusions drawn from the conference will be set out in a document which the committee will present on behalf of the Parliamentary Assembly at the Sofia conference. After that event, the committee will organise another meeting with the representatives of national parliaments to discuss the undertakings made by the ministers on which European parliamentary bodies and national parliaments can take specific action.

Eleventh meeting from CDPE

The Steering Committee for the Conservation and Management of the Environment and Natural Habitats (CDPE) held its eleventh meeting in Strasbourg from 7 to 9 June 1995.

The Steering Committee took note of Congress of Local and Regional Authorities of Europe (CLRAE) Resolution 256 (1994) on the 3rd Conference of Mediterranean Regions. With regard to the proposal to draw up a framework Convention on the management and protection of the natural and cultural landscape of Europe as a whole, the Committee expressed its concern at the proliferation of international legal instruments in the field of the environment and asked that it be allowed to express an opinion on the expediency of such a Convention in good time and to be associated as early as possible with the work of the CLRAE in order to avoid duplication of effort.

European diploma

The Committee has proposed the renewal of European diplomas in seven areas [Boschplaat nature reserve (Netherlands), Scandola nature reserve (France), Sasso Fratino nature reserve (Italy), Doñana national park (Spain), Fair Isle scenic area (United Kingdom), Berchtesgaden national park (Germany) and Ecrins national park (France)] and the award of diplomas to four areas [Ipolytarnoc protected area (Hungary), Szénas Hills protected area (Hungary), Berezinsky state reserve (Belarus), Weerribben nature reserve (Netherlands)].

Biogenetic reserves

The Committee took note of the introduction of 46 new protected reserves into the European Network of Biogenetic Reserves, taking the total to 333.

The Committee examined a draft recommendation on a sustainable tourist development policy in protected areas.

European Nature Conservation Year

The Committee took note of the progress of activities pursued under European Nature Conservation Year, outlined by its observer on the International Organising Committee and the Secretariat. It would examine the results of the exercise at its 1996 meeting.

Sofia conference

The 3rd Pan-European "Environment for Europe" Conference, to be held in Sofia from 23 to 25 October 1995, would bring together the Environment Ministers from the zone covered by the United Nations Economic Commission for Europe. The 2nd Pan-European Conference (Lucerne 1993) had designated the Council of Europe as "lead organisation" for problems of nature conservation.

The Committee prepared the Council of Europe's contribution to the Sofia Conference and was submitting its proposals to the Committee of Ministers principally on Pan-European Biological and Landscape Diversity Strategy and preparing also information documents, particularly for protected areas.

Shelter for swifts at the Council of Europe

On 20 June 1995, some twenty nesting boxes for swifts (*Apus apus*) were installed on one of the Council of Europe's buildings in Strasbourg.

The idea came from the Bird Protection League (LPO) and matches the theme of European Nature Conservation Year (ENCY), which is focusing on conservation outside protected areas. Representatives of the Council, the ENCY Executive Bureau, local and regional bodies and the LPO were on hand to see the boxes fitted.

Belonging to the same family as swallows, swifts are long-range migrants, arriving from Africa relatively late in the year (May) and returning early (in August). They never touch the ground, but sleep on the wing and feed on insects in the air. In towns, they nest under eaves and ledges, wherever they can find a nook or cranny. However, since modern buildings are short on suitable sites, nesting boxes are the only way of keeping them on the urban scene, where their high-pitched call is one of the distinctive sounds of summer.

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