Air Pollution   Health Impacts   Noise Pollution
Social Impacts   Traffic Model   Land Use
Planning GIS Habitats Institutional Processes
Energy Use   Transport Policy   Urban Form
(pattern and density of development) Population
Land Use *Routing Transport* private, public,
cycling, walking Effects of decisions by one
Planning Authority *on* the area of others
Dereliction and obsolescence   Heritage
archaeological architecture townscape
Refurbishment strategy, re-building *Participation*
vs. Exclusion   Consumption of greenfield and
amenity lands *effects of decision making* and
policy Air quality   Use of Renewable vs.
non-renewable resources Energy Safety Health
Education Employment Natural Environment
and Landscape quality   Partnership   Local
Authority Employers Unions Children Use of

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AGENDA 21
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SUSTAINABLE DEVELOPMENT

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LOCAL AGENDA 21 - A NEW CHALLENGE.

Ciaran M. Tracey.

INTRODUCTION.

The UN Conference on Environment and Development took place in Rio de Janeiro in 1992 This has become better known as the Earth Summit The summit produced a blueprint known as 'Agenda 21' This is a major plan for how the nations of the world can work both independently and jointly towards Sustainable Development The Irish Government endorsed 'Agenda 21' at the summit,

"Sustainable Development" has been defined in many ways However from the European perspective, the 'Bruntland' definition is probably the one most used This defines sustainable development as -

> *"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs"*

The World Wide Fund for Nature, defined it as follows

> *"Sustainable development means improving the quality of life while living within the carrying capacity of the supporting eco-systems"*

Protecting the natural and built environment is a fundamental element of sustainability However the concept is much broader than this It recognises that the quality of life for present and future generations is directly dependant on the long term health and integrity of the Planet and its environment The principal purpose of the Earth Summit was to place environmental issues centre stage in economic policy and decision making The need to strike a balance between development and conservation is at the heart of sustainability

The need to strike a balance between competing land uses is at the heart of the physical planning process in Ireland The issues of sustainability are the same as those of good planning The concept of sustainability infers that development can only take place within the carrying capacity of the receiving environment It seeks to reconcile the socio-economic aspirations of society with the ability of the natural environment to sustain them

Some of the best known aims of Agenda 21 relate to the reduction of consumption of raw materials and non renewable energy resources They include the reduction of waste by-products arising there -from as well as the elimination or at least reduction of pollution 'Agenda 21 also seeks to protect the environment especially recognised

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fragile eco-systems However probably the most important in both social and economic terms, Agenda 21 aims to bring about a more equitable distribution and re-distribution of wealth It does this by placing a special emphasis not just on the needs, but also on the rights of poor and disadvantaged nations

What have global issues got to do with local authorities and other sub national agencies? We are all familiar with the phrase Think Globally - Act Locally" This phrase is at the heart of the matter The achievement of the aims of Agenda 21 will require positive action at all levels International, national regional as well as local

Sustainable development cannot be imposed it can only be brought about by co-operation and partnership between all social and economic groups and interests" [1]

LOCAL AGENDA 21

Local Agenda 21 intends to complement sustainable development principles through practical actions at the lowest practicable level It is founded, primarily, on the principle of subsidiary i e that the decision-making process lies at the lowest level

Many of the principles of sustainable development are very familiar to us all They have been fundamental to the activities of local authorities for many years Local authorities already provide the framework for the integration of social, economic and environmental objectives in the decision-making process about development of land within their administrative area local authorities take account of the effect of their policies and proposals on future populations Local authorities make explicit the environmental implications of development options They already involve their communities through elaborate and extensive public consultation when making their development plans and more recently through the Part X procedures of the Local Government (Planning and development) Regulations 1994

Sustainability has introduced a new and crucial dimension to environmental considerations and highlights a change in approach away from the traditional view of the environment The environment is no longer viewed as solely an asset or amenity It is now the accepted view that the environment is a functioning system with a limited capacity' Local Agenda 21 requires a recognition and acceptance of the fact that there are limits to the ability of the environment to accommodate unfettered development

ENVIRONMENTAL CAPACITY

A major function of Planning in relation to sustainability is to ensure that 'the environmental-carrying capacity' is not exceeded It seeks to ensure that the 'stock' or asset' of both the natural and built environments are well maintained and passed on to future generations Planning for sustainability puts an obligation on each Local Authority to identify the maximum level of development that a local environment

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Guidelines for Local Agenda 21

(town or region) can sustain indefinitely. It requires that the environmental assets and capacity constraints are identified and measured

In order to achieve sustainability a Local Authority must draw up baseline measures and threshold levels. It must do this so that policies and plans can be measured against them. Baseline measures are available form many of the Local Authority's activities. Both National and E.U. legislation contain some of these baseline measures. Examples of these are Water and Air quality standards. Re-cycling Rates etc.

Some of the Local Authority's activities are not however measurable at present and cannot, therefore be measured in a quantitative way, one example is the Carrying Capacity Indicators relating to Land Use Planning. Indicators are being devised however, they are at an early stage of development but are not yet sufficiently sophisticated to facilitate quantitative analyses of all policies

Policies and plans however can be evaluated in a qualitative sense, and when this is done, it ensures that policies are consistent with the eventual achievement of sustainable development

One can identify four main objectives of sustainable development and the Local Authorities can evaluate their plans and programmes in relation to them. These four objectives are

1   To conserve finite resources,

2   To protect and preserve the quality of architectural and cultural heritage,

3   To minimise adverse impact of development,

4   To encourage public involvement in decision-making on environmentally sustainable issues.

1   Conserve Finite Resources

The conservation of finite resources is concerned with the use of land and the consumption of fossil fuels

In planning terms it relates to the issue of urban form which includes concerns arising from the pattern and density of development, decentralisation of population, urban expansion and increasing separation of work and home. These concerns are linked to increasing demands for car ownership consumption of land on the urban fringe, dereliction of central areas increased air pollution, and deterioration in the over-all quality of urban living

A strong correlation exists between low-density urban form and high car usage. High car usage results in increased air pollution, wasteful consumption of non-renewable

energy, traffic congestion increased incidences of traffic accidents and the undermining of economical forms of public transport

The challenge of Local Agenda 21 is to address the above difficulties and the promotion of sustainable policies   For example, there is a need to adopt mixed uses, land use zoning policies to minimise home-work separation   There is a need to adopt higher residential densities   The promotion of public transport and a restrain on private car usage for daily commuting should also be contained in these policies

2   Protect Local Capital

Protecting local capital is concerned primarily with the preservation of the built and natural environments and public infra-structure   To this end local authorities need to adapt appropriate policies for the protection of natural habitats and for the promotion of bio-diversity   Local authorities also need to promote the re-use and re-development of buildings and urban derelict land   They need to identify and conserve existing urban areas and buildings of high environmental and architectural quality   Many of these items are already planning policies and objectives set out in the local authority's Development Plan   Policies include listing of buildings designation of conservation areas   designation of green belts   high-amenity zoning and protection of areas of scientific interest (to be known in future as   natural heritage areas')   The promotion of urban renewal and re-development of derelict land are central to sustainability

3   Minimise Adverse Impact of Development

Minimising the adverse impact of development relates generally to the protection of the integrity of the built and natural environments, from damage caused by insensitive new developments   In the context of sustainability the issues raised relate to the need to avoid damaging the natural and artificial amenities of an area   it s natural habitats and features and quality landscapes   There is need to ensure that the environmental implications of development proposals are fully evaluated   thereby avoiding adverse effects   Environmental Impact Assessment is an excellent example of this approach

Evaluation of the environmental implications of development proposals should permeate through the planning system to the processing of the simplest planning application   Issues dealt with in this process relate to pollution-prevention and control, including litter control   waste management, road-building and housing   The issues of high design standards, which incorporate BATNEEC[2] in terms of energy conservation, must be applied to all local authority projects   Overall thermal performance that exceeds current building Regulation Standards needs to be applied

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[2] Best Available Technology Not Exceeding Excessive Costs

4   Community Involvement

Local Agenda 21, cannot succeed without the involvement and support of the whole community   Ideally there should be a broad collaborative approach, guided and facilitated by the local authority and it's locally elected members   Information will need to be provided to the public to raise awareness   There will be a need for public consultation and feedback   Partnerships between local authorities, business and communities, will have to be established and the continuous monitoring of progress towards sustainability fed back to the local community   Local Agenda 21 should provide a mechanism for local authorities to consider the social and environmental impacts of their actions   It should also enable them to consider the interaction between these activities and the practical objectives of sustainable development   Local Agenda 21 should enable local authorities to conserve resources, minimise adverse impact on the environment and on society, and obtain the maximum benefit, in both financial and environmental terms, from the discharge of their functions

CONCLUSION

This paper only touches on some of the aspects of Local Agenda 21   There are many more aspects of Agenda 21 concerning Central Government, Europe, Local Authority planners and councillors, academics and the community perspective which will be addressed in subsequent papers   Agenda 21 is a challenge to all

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BACKGROUND TO LOCAL AGENDA 21 AND THE NATIONAL SUSTAINABLE DEVELOPMENT STRATEGY

Geraldine Tallon

INTRODUCTION.

The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in June 1992, represented the culmination of global negotiations to bring about a coherent framework for the application of sustainable development UNCED resulted in the adoption of a number of important measures including

> **the Rio Declaration, a charter of basic principles on environment and development,**

and

> **Agenda 21, a blueprint for sustainable development policies towards the 21st century, establishing a set of practical action programmes in all relevant areas**

The policy debate surrounding the concept of sustainable development has evolved since the beginning of the 1980s as appreciation of the extent of inter-dependence between economic development and environmental issues deepened Debate at global level revolves around three key issues, which have major implications for environment policy

- **Population Growth**

  Global population has more than doubled since 1950 and is projected to grow from the present 5 5 billion to around 8 5 billion by 2025 Growth is disproportionately fast in developing countries least able to provide for well-being Population is also urbanising faster than it is growing between now and 2025 the world's urban population is likely to triple

- **Economic Growth**

  Global economic output has increased 6-fold since 1950 This has been accompanied by increased emission, steadily increasing energy consumption depletion of natural resources, species loss and soil degradation Improvements in energy and materials

efficiency are being more than offset by increases in volume output

- **Poverty/Global Inequity**

  The share of global income going to the richest 20% of the world population rose from 70% in 1960 to 83% in 1989 Sustainable development incorporates quality of life considerations, it implies increased social well-being as well as economic and ecological viability UNCED placed a particular emphasis on equity within generations as well as between present and future generations Alongside the globalisation of environmental concerns, Agenda 21 recognised the responsibilities of the developed towards the developing world

AGENDA 21.

UNCED had at its core the idea that humanity had reached a turning point It could choose to continue present policies which were deepening economic divisions within and between countries, and causing continuing deterioration of the ecosystem on which life depends Or it could choose to change course The preamble to Agenda 21 stated that

> *"integration of environment and development concerns and greater attention to them will lead to the fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future"*

The level of change involved requires a global partnership Within this, implementation of Agenda 21 programmes is the responsibility of Governments, who would be supported by the efforts of international regional and sub-regional organisations, and broad public participation

Choosing to change involves often difficult choices, nationally and internationally The costs of past environmental damage are large may grow further and must be met Some forms of damage such as ozone depletion climate change biodiversity loss, affect not just local ecosystems but the global ecological balance An extension of industrialised consumption patterns to the whole planet could increase the demand for natural resources ten-fold In choosing to change, the objective is to understand the relationships between environment and development, and to seek to secure growth within the carrying capacity of the environment The right to development is underlined in the Rio Declaration and it is not at issue provided it is fulfilled equitably to meet present and future needs

Alongside equity Agenda 21 emphasises for example, quality, efficiency, management conservation and participation all involving active engagement in a

dynamic programme, which was expected to evolve over time in the light of changing needs and circumstances

Global follow-up to UNCED and progress towards sustainable development, are monitored by the UN Commission on Sustainable Development (CSD) established in 1992 Ireland was elected as a member of the CSD (which has 53 members) in 1996, with a term of office from 1997 - 1999 Because of the long-term nature of Agenda 21 Chapter 38 provides for a regular review of implementation for this purpose a Special Session of the UN General Assembly (UNGASS) is to be held in June 1997 This will seek to revitalise and energise the commitment to sustainable development, improving awareness and building consensus for further action It will not involve any renegotiation of Agenda 21

DEVELOPMENTS AT EU LEVEL

The European Union has a well defined sustainable development agenda The Maastricht Treaty binds the Union to sustainable and non-inflationary growth respecting the environment A view has now emerged that a more explicit commitment to sustainable development should be incorporated in the European Treaty Ireland is supportive of this view and is seeking to agree a suitable formulation within the Intergovernmental Conference Economic and social components of sustainable development are supported by Structural and Cohesion Funds The environmental component is incorporated in the Fifth Environment Action Programme, which was strongly influenced by Agenda 21

Supported by a Progress Report on implementation completed by the European Commission in January 1996 and by a report from the European Environment Agency (EEA) on Environment and the European Union, 1995 the Fifth Action Programme is now under review Completion of the review is a priority of the Irish Presidency of the EU It is acknowledged that the basic approach is still valid, and that some progress has been made But, much remains to be done in order to achieve the objective of moving towards sustainability In particular the EEA concluded that progress in reducing pressures on the environment is not enough to improve the general quality of the environment and even less to progress towards sustainability

The proposed decision on the review targets key priorities for improved implementation

better integration of the environment into other policies,

a broader range of instruments to support policy deliver,

improved implementation and enforcement mechanisms,

awareness raising and better access to information,

strengthened international co-operation,

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an improved basis for environmental policy making,

movement towards sustainable production and consumption patterns,

shared responsibility and partnership,

promotion of local and regional initiatives,

further development of policies in relation to the environmental

themes of the Programme.

Both Agenda 21 and the EU's Fifth Action Programme identified key, widely accepted, approaches to sustainable development. At EU level, the review seeks to sharpen priorities and develop better mechanisms for implementation to the end of the decade. Reaffirmation of its policies is also an important part of the EU preparation for UNGASS.

NATIONAL DEVELOPMENTS.

Ireland is now well bound into international thinking on sustainable development, and, during the 1990s, substantial efforts have been made to give it practical expression in a national context.

The Environment Action Programme in 1990, and the National Development Plan in 1993 affirmed Government commitments to sustainable development, and to principles (eg polluter pays principle) and policy measures which would support this approach. Specific strategies were published on Climate Change - CO_2 Abatement (1993), and on Waste Recycling (1994).

Environmental legislation has been modernised and consolidated, most recently with the enactment of the Waste Management Act, 1996. Environmental management arrangements have been rationalised with the establishment and build-up of the Environmental Protection Agency which is required by law to have regard to the need to promote sustainable and environmentally sound development, processes or operations.

Public awareness has been encouraged, and the role of citizens reinforced, by the operation of ENFO and by rights of access to environmental information. In 1996, the Constitution Review Group recommended the inclusion in the Constitution of a duty on the State and public authorities, as far as practicable to protect the environment, to follow sustainable development policies, and to preserve special aspects of our heritage.

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National Sustainable Development Strategy

The effort to chart a sustainable development path for Ireland is now focused on the definition of a National Sustainable Development Strategy, which the Minister for the Environment intends to finalise and publish in the new year. There have been, and are, several preparatory and complementary inputs to this process

These include the following

- In March 1995, a Joint Oireachtas Committee on Sustainable Development was mandated to identify in prospect of the Strategy, measures to maximise the advantage of environmentally sustainable sectoral policies and ways of increasing Irish participation in the world market for environmental goods and services. The Committee is due to report in early 1997

- To provide a background context and point of reference for the Strategy in May 1995 the Department of the Environment published a baseline review of current environmental policy and developments, entitled Moving Towards Sustainability"

- Local Authorities and Sustainable Development - Guidelines on Local Agenda 21 were published by the Department of the Environment in June 1995 to coincide with a national conference on local agenda 21 and to generate discussion on local initiatives to support and complement the national strategy

- A comprehensive State of the Environment Report was published by the Environmental Protection Agency in April 1996

- An ongoing work programme towards the definition of sustainable development indicators included publication by the ESRI, in April 1996, of a commissioned study on methodologies for developing such indicators and publication by LCD in May 1996 of Conference proceedings on Assessing Sustainability in Ireland"

- Fifty three submissions were received in response to an invitation by the Minister for the Environment in the national press in February 1995, seeking written submissions form interested bodies, organisations or individuals for consideration in the strategy preparation

Maintaining a high quality environment for Ireland, through sound management of physical resources is at the centre of environmental policy, and the integration of this concern into all aspects of programmes, plans and policies is essential to reach the goal of sustainable development. A more focused approach to environmental issues over recent years has contributed to a better understanding of the problems and challenges of environmental protection. In particular the State of the Environment Report has clearly identified areas of particular concern

For example

- national CO emissions continue to increase with little change expected in the foreseeable future

- transport emissions (eg NO_x VOCs) are increasing,

- a marked reduction in unpolluted and seriously polluted river channel is offset by a significant increase - to 28% - in slight to moderate pollution,

- there is an annual growth in solid waste generation, currently around 38 million tonnes a year of which only some 12% is recycled or reused,

- modern agricultural practices are seen as one of the main threats to the landscape While CAP reform is alleviating some pressures, e g sheep overgrazing long-term success remains to be seen

The national strategy will prioritise issues, set objectives and targets, outline mechanisms for integration present analysis of sectoral concerns and plan implementation frameworks In doing so it is drawing on the preparatory and complementary inputs already indicated on research, policy development and review at EU and international levels and on related policies or actions at national level

Its content will

- focus on priority environmental themes and resources,

- identify target groups in economic sectors and in a social context, notably the five key areas of agriculture, industry, transport, energy and tourism and issues related to planning and human settlements,

- define an appropriate time-frame for sustainability planning,

- develop sectoral targets,

- identify supporting policies and instruments,

- develop implementation and review frameworks, including central, regional and local Government, voluntary and individual action, technology, research and innovation indicators and economic mechanisms

- address international and global issues including responsibilities with the EU and at wider levels

A central concern of the Strategy will be to ensure that economic growth, which is now strongly established does not add to existing environmental pressures On the contrary sustainable economic development must seek to break the link between increased production and greater consumption of environmental resources Developed economies have shown that this can be achieved without affecting growth,

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competitiveness or jobs There are a range of policy options other than environmental regulation which may be pursued
For example

- eco-efficiency (variously interpreted as growth with lower financial and environmental costs or a more fundamental reduction in energy and materials consumption) and sustainable production and consumption (with less materials use and less waste) integrate environmental considerations into productive sectors,

- economic instruments and pricing measures can significantly influence behaviour give a greater role to market forces to achieve environmental objective cost-effectively, and provide an incentive to innovative solution,

- voluntary action and participation in environmental management systems can promote economic and environmental efficiency, respond to the concerns of green consumers and assist the marketing of products, and minimise the risk of accidental environmental damage

LOCAL AGENDA 21

Shared responsibility by all sections of society for the environment, and action by sectors and organisations on a voluntary basis are now appreciated as an essential complement to regulation of the environment by public authorities The concept of shared responsibility reflects public ownership of the environment, and the empowerment of people to exercise that responsibility is an important part of Agenda 21 and of national environmental policy Local Agenda 21 is part of the overall objective of strengthening the role of major groups and devising new forms of partnership for environmental protection

Local Agenda 21 is internationally seen as an important pillar of Agenda 21 This year, the UN CSD and the International Council for Local Environmental Initiatives (ICLEI) prepared a survey of local authorities to assess progress in the implementation of Agenda 21 at a local level Preliminary results were released at the Habitat II Conference in Istanbul earlier this year

The early response indicates that

- more than 1 500 local governments in 49 countries have established Local Agenda 21 planning processes in partnership with the voluntary and private sectors in their communities

- national Local Agenda 21 campaigns have been established or are under way in many countries, e g Australia, Brazil, China, Denmark, Finland Germany Greece Hungary Ireland, Japan, the Netherlands, New Zealand, Norway Republic of South Africa, Sweden, Tanzania, and the United Kingdom,

- some of the countries most advanced in the implementation of Local
  Agenda 21 are Sweden (with 100% of local governments involved),
  Norway (95% involvement) and United Kingdom (over 50%
  involvement)

Final results of the international Local Agenda 21 survey are expected to be available
in June 1997 to coincide with UNGASS

Local authorities have had the Department of the Environment s Local Agenda 21
Guidelines for over a year now   The Guidelines are non-prescriptive, making
suggestions and inviting participation   The process, however, is an important support
and contribution to sustainable development   In the words of the Minister's Foreword
"Building on the strongly representative character of the local government system, on
its key functions notably in the areas of planning and land use, environmental
protection and infrastructure provision, and on the opportunities for co-ordination
afforded by the regional authorities   Local Agenda 21 can give new emphasis and
direction towards the goal of sustainable development '

Local Agenda 21 is important for many reasons, for example

- local government is the level of government closest to people,

- planning of many environmental activities and services, largely
  controlled at local level   and their subsequent administration, have a
  critical role in securing balanced environmental protection and socio-
  economic development

- sustainability is not well defined or understood, it is a broad concept
  that needs to be given local content and application,

- people live locally   not nationally or internationally,

- many concerns and values are shaped by regional and local
  circumstances   and an understanding of the direct benefits of
  sustainable development can mobilise essential supporting action,

- local partnerships and communication increase the relevance,
  credibility and acceptability of sustainability considerations, and
  provide a vital linkage between individual, community, local, regional
  and national action

Many local authorities are now developing their own Local Agenda 21 initiatives or
are having scoping studies towards the process carried out   In the preliminary
responses to the CSD/ICLEI survey a majority of local authorities identified
themselves as being   involved in gathering information on Local Agenda 21 activity '
In addition, under the Department of the Environment's Local Authority Environment
Awards Scheme, 1996 (currently being adjudicated upon) a substantial proportion of
applicants have identified Local Agenda 21 as one of their primary areas of
environmental activity

CONCLUSIONS A WAY FORWARD FOR LOCAL AGENDA 21

Local Agenda 21 does not mean starting from scratch It can and should build on existing policies, partnerships and activities so that sustainable development considerations - balancing environmental protection and conservation, and socio-economic development - inform all relevant activities of local authorities In addition to core functions many other appropriate activities are identifiable in current local authority environmental campaigns including

- Green Housekeeping ' activities,

- Healthy cities activities,

- Urban and Village renewal projects,

- Waste management and recycling initiatives,

- "Action against Litter" campaigns,

- Liaison with business/farming interests,

- Blue Flag/Clean Beaches activities,

- Environmental awareness initiatives with local community groups and schools,

- Heritage/Conservation measures,

- Liaison/Assistance to Tidy Towns Committees,

- Tree Planting/Urban Forestry initiatives

Local Agenda 21 can offer an opportunity to review activities in a new light, and draw together the various programmes and commitments of the local authority to focus on long-term sustainability While a range of suggestions are made in the Guidelines, individual authorities will seek and develop their own emphasis, and sustainability concerns may vary in several respects from area to area, depending for example on settlement patterns the local economy the local landscape and the quality of natural resources It is important to reflect local vision and local concerns, and to do so, the direct involvement of elected members and broad community participation are essential

If it is to have real meaning a Local Agenda 21 should contain clear priorities and targets starting with the local authority's own environmental responsibilities It should also make clear where responsibility for action towards a particular target lies, who can best take or contribute to the action and how targets are to be approached and achieved While short-term goals are an incentive to act it has to be recognised that sustainable development is a long-term objective Targets which require major reform or conversion are perhaps best set incrementally so as not to undermine the process involved Local Agenda 21 should incorporate arrangements for measuring progress towards targets and for reviewing proposed approaches to take account of changing situations

THE EUROPEAN PERSPECTIVE TO LOCAL AGENDA 21 AND SUSTAINABILITY.

John Bennett

INTRODUCTION.

This paper outlines the main elements of European policy for the environment and sustainable development and goes on to discuss some aspects of the implementation of that policy with particular reference to the issues of sustainability and Local Agenda 21

EUROPEAN ENVIRONMENTAL POLICY

Treaty References

The European Community's first directive concerning the environment dates from 1967 Its First Environmental Action Programme was prepared in 1973 However, the environment is not specifically mentioned in the original treaties The Single European Act (1987) inserted a chapter on the environment and a significant environment element in the section relating to the internal market, thus providing, for the first time a treaty mandate objectives and criteria for Community policy and action in the field of the environment

The Maastricht Treaty adopted in 1992 built on this by including a number of key provisions relating to the environment Article 2 refers to the promotion of a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment Article 3 (k) says that the Community shall have a policy in the sphere of the environment Article 130r 2 provides inter alia that this policy shall aim at a high level of protection and that it shall be based on the precautionary principle and it stipulates that environmental protection requirements must be integrated into the definition and implementation of other Community policies

Fifth Environmental Action Programme

In the years since the adoption of the Maastricht Treaty, the question of the environment has become one of the most important issues for the European Community partly in response to developments at international level including the United Nation s Conference on Development and the Environment in Rio de Janeiro in

1992 which produced the Agenda 21 action programme for sustainable environmental development

Since the First Environmental Action Programme in 1973 Community environment policy has given rise to c 200 pieces of legislation covering pollution of the atmosphere water and soil waste management safeguards in relation to chemicals and biotechnology product standards environmental impact assessments and protection of nature

The Fifth Action Programme was adopted in 1992 It represents a radical shift in emphasis from the earlier regulatory approach to an emphasis on behavioural change, integration of environmental and other relevant policies, active participation of the main actors in society and broadening the range of instruments that are employed to achieve environmental objectives The key concept is that of sustainable development as defined in the United Nation s report Our Common Future" presented by the Brundtland Commission in 1987 namely

> *" development which meets the needs of the present without*
> *compromising the ability of future generations to meet their*
> *own needs. "*

A cornerstone of the Fifth Action Programme is the call for significant changes in human consumption and behaviour patterns The preventive principle underpins the programme s approach Prevention is to be achieved by focusing on the agents and activities which damage the environment rather than the traditional approach of waiting for problems to emerge before a response is triggered The emphasis is very much on the sharing of responsibility for the environment at all levels of society (including the European Community National Governments Regional and local authorities NGOs the private sector and individual citizens) and on broadening the range of instruments for control and behaviour change including in particular, greater use of market based instruments The Fifth Action Programme sets out a strategy to achieve full integration of environmental and other relevant policies the practical implementation of which is intended to be carried out at the appropriate level in accordance with the subsidiarity principle Five sectors are singled out for special attention namely industry energy transport agriculture and tourism

The Fifth Action Programme recognises that the road to sustainable development is a long one as it involves changes attitude and behaviour on the part of both consumers and producer interests The legislative or command and control approach cannot be fully effective in such circumstances A broader strategy is necessary, involving integration at the policy and administrative levels and more sophisticated instruments which are capable of influencing people's behaviour

Interim Review of the Fifth Action Programme.

The implementation of the Fifth Environmental Action Programme was reviewed in 1995 The progress report was published along with the European Environment Agency s updated State of the Environment Report The progress report concludes

that the overall strategy and objectives of the programme remain valid. There has been some progress since 1992 but on the key issues progress has not been sufficient such as to allow the conclusion that a sustainable path of development is being achieved.

Some of the conclusions of the progress report are

Integration of environmental considerations into the five target sectors has made progress but at varying aspects. It is most advanced in manufacturing industry (where it is well underpinned by legislation and were economic advantages may be most readily seen) but at least apparent in agriculture and in tourism. The report recognises that it is fundamentally difficult to introduce new directions in the Common Agricultural Policy. Tourism is seen as a highly fragmented and diverse sector where a large number of interests must be reached in order to effect change. In the transport and energy sectors the report says that there has been progress on isolated issues but it has proved difficult to tackle structural problems. In the field of transport awareness of the problems is increasing progress is being made on vehicle emissions fuel quality and technology but the overall growth in vehicle numbers negates progress. In the energy sector what is missing is an incentive to move to a more sustainable approach.

There has been progress in the reduction of ozone-depleting substances emission of heavy metals and sulphur dioxide, and improvements in approaches to nature protection surface water quality, industry-related risks and waste. More attention needs to be paid to developing improved approaches to climate change and acidification urban issues including air quality noise and waste, together with a comprehensive strategy for ground and surface water resources

Broadening the range of instruments has proved for difficult that envisaged. There has been little progress with market-based instruments at European Community level (for example, the energy/CO_2 tax proposal) although there have been successes is some Member States. However there is no fundamental questioning of the approach of the Fifth Programme namely the need for other instruments to complement the regulatory approach, and market-based tools are seen as among the most important for the future

There have been improvements in the integration of environmental considerations in the Community s financial support mechanisms but there is a need for improved evaluation of environmental impacts in this area

There is a need for more effective implementation structures and institutional arrangements at all levels in order to take account of the growing body of legislation the increasing number of instruments

and the internationalisation of many issues There is also a need to make progress on developing indicators which allow progress to be measured, and to ensure the compatibility and comparability of environmental data on which legislation and other actions are based (a central task of the European Environment Agency supported by the Member States)

Changing attitudes has proved the most difficult task, despite some positive signs at local level This reinforces the need to build awareness to further develop the concept of shared responsibility and above all to implement actions which help the individual citizen to see the relevance of the process and to accept the need for sustainable production and consumption patterns The urban context is seen as particularly important for this, as it mirrors many of the difficulties in achieving sustainability and offers possibilities for a more co-ordinated approach to environmental and land-use problems involving a horizontal, territorial approach

Future Action

On the basis of the progress report s findings, the Commission has put forward proposals to further the strategy outlined in the Fifth Environmental Action Programme These proposals also follow on from the EEA report's call for an

> *" accelerated EU environmental policy if the European Community wants to achieve the environmental objectives and targets for the year 2000 and beyond identified in the Programme, i.e to pave the way to sustainable development "*

The proposals focus on action at the Community level under ten headings

1   **Better integration of the environment into other policy areas**

A wide ranging and extensive list of measures is suggested for each of the five sectors identified in the Fifth Programme They include awareness-raising linking aid payments to environmental considerations monitoring and reporting arrangements with respect to environmental pressures and effects internalisation of external costs in order to influence user choices, promotion of environment-friendly and sustainable technologies, promotion of demand-management initiatives further tightening of standards, support for the development of eco-management schemes in industry including life-cycle analysis and produce policy and promotion of eco-businesses The proposals in the transport sector include promotion of the better integration of land-use and transport planning and of the exchange of experience among local authorities in relation to sustainable transport initiatives

2   Broadening the range of instruments

In particular to include market-based instruments and use of the Community s own financial support mechanisms Among the instruments mentioned are environmental charges, application of the concept of environmental liability voluntary agreements in conformity with competition rules, taxation reform, environmental impact assessment for plans and programmes, integration of environmental aspects in the elaboration of industrial standards and incorporation of environmental considerations in the Community s public procurement regulations in conformity with competition rules In relation to the Structural and Cohesion Funds, the proposals refer to a "a better integration of environmental considerations and an evaluation of their environmental impact as a means of improving the quality of support action from the environmental and economic points of view

3   Improved implementation and enforcement

Improved implementation and enforcement of Community environmental legislation

4   Additional action

Additional action in relation to communication, information, education and training to raise awareness of sustainable development issues and promote behavioural changes in all sectors of society

5   Reinforcement of the Community's international role

Reinforcement of the Community's international role including the promotion of environmental considerations in trade negotiations

6   Improvement of the factual basis.

Improvement of the factual basis for formulating Community environmental policy, including the improvement of statistics and indicators and development of cost-benefit analysis techniques A key issue is the development of environmental indicators to act as benchmarks to measure progress towards sustainable development and to allow for the setting of objectives and targets

7 **Promotion of awareness and changes in behaviour**

Promotion of awareness and changes in behaviour by industry
and consumers with a view to moving to sustainable patterns of
production and consumption   A key issue concerns the
promotion of innovation in industry

8 **Further developing the concept of shared responsibility**

9 **Promotion of initiatives at local and regional level**

In particular in relation to the sue of spatial planning as an
instrument to facilitate sustainable development

10. **Further development of the environmental themes**

Further development of the environmental themes identified in
the Fifth Programme (climate change, and ozone depletion,
acidification and air quality management of water resources,
waste management noise nature protection and biodiversity as
well as chemicals management)

As regards local and regional initiatives the aim is to promote territorial approaches
addressing the urban environment the rural environment, coastal and island zones,
cultural heritage and nature conservation areas   It is intended to give particular
attention to the following

Promoting the potential of spatial planning as an instrument to
facilitate sustainable development and further developing Europe
2000+ and the European Spatial Development Perspective as the
basis for creating consensus among policy-makers in relation to the
territorial impact of sectoral development policies

Developing a comprehensive approach to urban issues with special
emphasis on the assistance required to support actions by local
authorities to implement the Programme and Local Agenda 21

Developing a demonstration programme on integrated management
of coastal zones

Developing a strategy to encourage local initiatives for development
and employment to contribute to the conservation of natural areas,
supported by the Structural Funds

LOCAL AGENDA 21 AND THE EUROPEAN COMMUNITY

Chapter 28 of Agenda 21 calls on local communities to create their own Local Agenda
21 by taking the general purposes of Agenda 21 and translating them into concrete

area-specific plans and actions. Local Agenda 21 may thus be seen as a strategic process of encouraging and controlling sustainable development at local level involving initiative by local authorities in partnership with other players

The European Community participated in the Rio Conference and pledged itself to implementation of Agenda 21 within its field of competence. When approving the Fifth Action Programme the Council of Ministers committed itself to working towards the incorporation of Agenda 21 into the relevant policy areas of the Community and the Member States. In the view of the European Commission the Fifth Action Programme constitutes an appropriate point of departure for the implementation of Agenda 21 by the Community and the Member States '

The European Community and its key institutions including the Committee of the Regions are fully committed to progressing the Local Agenda 21 process How is this commitment manifested in practice? The first thing to be said is that the Local Agenda 21 process does not concern either the regulatory or the funding roles of the European Community there is no European legislation which requires the preparation of Local Agenda 21 plans and no European funding for the process

Promotion and Information Dissemination

The European Commission s approach to Local Agenda 21 emphasises promotional activities dissemination of good practice and support for European networks Among its initiatives in this regard the following may be noted

> The Commission established the Expert Group on the Urban Environment in 1991 following the publication of the Commission's Green Paper on the Urban Environment The group consists of national representatives and independent experts In 1993 the group launched the Sustainable Cities Project" to focus on sustainable urban development and the integration of environmental objectives into planning and management strategies The main output of the project to date is the European Sustainable Cities Report which is concerned with identifying the principles of sustainable development and the mechanisms needed to pursue it, not only in cities, but at all levels of the urban settlement hierarchy

> The Commission is supporting the European Good Practice Information Service a pilot project which is creating a "good practice" database with details of European towns and cities which are participating in sustainable development activities, including Local Agenda 21

> The Commission together with other interested parties launched the European Sustainable Cities and Towns Campaign in 1994 The campaign promotes the idea of sustainable development and assists in the implementation process It was initiated by a charter signed by 80

European local authorities at a conference in Aalborg Denmark in May 1994 Some 279 cities and towns have now signed the charter, by which they commit themselves to preparing and implementing a local action plan to work towards sustainability in the framework of the Local Agenda 21 process

The Commission is partnered by five networks in the European Sustainable Cities and Towns Campaign, these are

The International Council for Local Environmental Initiatives (ICLEI),

The Council of European Municipalities and Regions (CEMR),

Eurocities,

The United Towns Organisation,

World Health Organisation - Healthy Cities Project

These networks are also individually active in promoting, supporting and facilitating the implementation of Local Agenda 21, often in projects which are co-funded by the European Commission

The ICLEI has prepared a guide outlining a step-by-step process for preparing a local Environmental Action Plan which is intended to be used by a local authority to inform its own Local Agenda 21 process

The CEMR has established a European Local Agenda 21 Network It has also launched The European Sustainable Cities Award, in co-operation with The European Sustainable Cities and Towns Campaign 1966 six was the first year of the competition over ninety applications were received and five towns and cities were selected for the award A call for applications for the 1997 competition will be announced by CEMR in early 1997

Co-funding instruments

While there is no Community financial support for preparing Local Agenda 21 plans, some Community financial instruments may be relevant to aspects of the process As the key concept of the Fifth Programme is integration it inevitably means that Community funding for projects which contribute to the implementation of the programme is dispersed among a wide variety of financial instruments

The **LIFE** financial instrument for the environment provides support for innovative projects which foster the objectives of the Fifth Environmental Action Programme and it includes a specific strand for actions by local authorities

Programmes in the energy section (such as **SAVE, THERMIE** and **ALTENER**) aim to promote energy efficiency or alternative including renewable, sources of energy

The **RECITE II** programme (which provides support for inter-regional co-operation networks) includes environmental actions aimed at promoting sustainable development as one of its five priority themes

The **TERRA** programme (pilot projects for trans-national spatial planning) and the **INTERREG II C** programme (inter-regional co-operation) are also seen by the European Commission as relevant to the implementation of concepts in the Fifth Action Programme, although their application to Local Agenda 21 may be somewhat removed

Spatial Planning

The Commission's report Europe 2000+" emphasises the need for regional policy and programmes to take account of the principle of sustainable development and it underlines the role and contribution of spatial planning to both the environmental and economic and social cohesion objectives Increasingly the European Community sees a role for land use/spatial planning in the implementation of sustainable development strategies at all levels of administration but principally at local level Spatial planning is seen as a practical tool for integrating the territorial impact of sectoral policies and for promoting economic and social cohesion

Land use is a significant determinant of environmental pressures These pressures in interaction with the environment s degree of vulnerability determine the quality of the environment

Spatial planning can help to match development policies and land use with the environment s carrying capacity whether this be at the Community, Member State regional or local levels Such an approach involves ensuring that environmental instruments such as the Birds and Habitats Directives Agri-environmental Regulation and Directives concerning urban waste water and shellfish (all of which require area designation) are integrated in spatial plans and furthermore that spatial planning is used as a tool for integration across the five target sectors identified in the Fifth Action Programme

Strategic Environmental Assessment

The European Commission has put forward proposals for a directive on strategic environmental assessment a procedure for the assessment at the strategic level of the effects of any proposed policy programme or plan on the environment If approved, the Environmental Assessment of Plans and Programmes directive would have implications for the land-use planning process as it would require that more attention be given to the assessment of the environmental and territorial impact of sectoral policies This is something which is certain to feature on the agenda in future years

Structural Funds and Environmental Policy

The European Commission wants to promote greater synergy between the Community's structural policy and its environmental policy. Essentially this means a greater integration of environmental policy objectives in the implementation of programmes and projects being co-financed by the Structural and Cohesion Funds. The Commission sees these funds as an opportunity to operationalise sustainable development.

The Commission published a communication document on this subject in November 1995. It states that during the first round of programming for the Structural Funds (1989 - 1993), the European Parliament, the Court of Auditors and NGOs criticised the lack of systematic environmental appraisal procedures and the co-financing of projects allegedly damaging to the environment. As a result the regulations were overhauled to take on board the concept of sustainable development and to integrate the environmental dimension into all stages of programme preparation and implementation. Consideration of environmental objectives at programming level is now compulsory and the designated environmental authorities must be involved. Furthermore, the definition of environmental impact indicators has been improved.

The Commission considers that there is scope for further improvement of environmental assessment and monitoring at programme level. The Commission is also concerned about the often poor quality of environmental assessments at the project level and the lack of transparency in procedures. Among its ideas for improving the situation are the use of differentiation in rates of assistance to take account of environmental factors, improvements to the system of environmental monitoring and evaluation at programme level (better impact indicators, clarification of the role of the environmental authorities and capacity building measures in the administrations) improved control procedures at Monitoring Committee level in relation to project selection and the application of the EIA Directive and a greater role for environmental NGOs.

CONCLUSION

It seems inevitable that increasingly greater priority will be given to sustainable development issues and sound environmental practices in future years and that this will be reflected in a wide range of European Community policies and programmes. It is evident that the Commission wants to improve the monitoring and evaluation of environmental aspects of co-financed programmes and to strengthen the selection criteria for projects so that they better reflect compliance with environmental rules. Environmental questions are therefore likely to feature prominently in decision-making in many spheres policy-making including agriculture and structural policy, two areas that may be of particular interest in Ireland.

The key concepts of the Fifth Action Programme - *behavioural change, integration of environmental policies with other relevant policies broadening the range*

instruments greater use of market incentives and sharing of responsibility - are inherently difficult to implement in practice

Implementation efforts inevitably confront formidable obstacles in the shape of dispersed competence and deep conflicts between a variety of sectoral administrative and environmental interests. While the path to sustainable development must clear many hurdles at European and national levels it is clearly recognised that the local level may offer a special opportunity to advance the sustainability agenda as it is the level which is the closest to the every day lives of the citizen and at which it may be possible to successfully tackle many of the issues in an integrated manner through local partnership arrangements

There is very little comparative information available about the implementation of Local Agenda 21 in the Member States of the European Union although it is understood that CEMR is preparing a report on the matter. Two hundred and seventy nine towns and cities have signed the Aalborg Charter and a recent report of the Committee of the Regions says that over 500 local and regional authorities in the Member States have started work on framing a Local Agenda 21. To put these figures in context it may be noted that the national associations represented in the CEMR have over 100 000 members while Local Agenda 21 would not be relevant to all of these communities, the comparison does serve as a crude indicator of the scale of the task that is involved in promoting the implementation of the process

THE COUNCILLORS ROLE IN AGENDA 21.

Councillor Olivia Mitchell

For any County Councillor, or indeed for anyone interested in Local Government, Agenda 21 must have enormous appeal and potential For the first time, we have one compelling central theme for what we do Hitherto, Councillors seemed to be involved in a whole series of apparently unrelated activities Sustainable development in general and Agenda 21, in particular, by requiring integration of all our economic, social, cultural, and community activities with environmental concern provides us with one encapsulating definition of what local government is all about

Agenda 21 places local government right at the centre of delivering, what is, not only Government policy, but also E U and U N global policy Despite the might and influence of all those organisations they will depend on us on our actions at local level to deliver development that is sustainable Simply, it is only at local level, at the level of the individual in fact that it can truly be delivered

Local government faces a huge challenge because Agenda 21 involves, not only changing our own policies and practices but also the attitudes, practices and even the aspirations of the public at large If we are to persuade the public to the value of sustainable development and to therefor accept the very far reaching changes, which that will involve then local authorities are or should be at the start of the biggest marketing campaign ever undertaken in the history of local government Elected public representatives as the policy makers and as the public face of their County Councils have an enormous and indeed the central role to play in this

Sustainable development although it was not called such is not something new to local authorities It has always been the business the very purpose of local authorities, to order and to facilitate all of the human activities which necessarily accompany the concentrations of populations in villages towns cities And of course, it is increased urbanisation and the impact of those growing cities and towns on global climate and on the ozone layer which gave rise to Agenda 21

The attraction of Agenda 21 to me as a County Councillor is not a global concern, but a concern for Dublin my own city our national capital and the potential that Agenda 21 offers as an opportunity to right some of the mistakes of the past and to chart a new course for the future I love Dublin it is a wonderful city and I wouldn't want to live anywhere else but I don't think anyone can deny that for the last 30 years or so, certainly until very recently it has been on a path of development that is completely unsustainable The Dublin conurbation now effectively covers four counties, the whole of Dublin as well as the counties of Kildare Meath and Wicklow There is a clear and undeniable link between that kind of urban sprawl and high car ownership inefficient

public transport traffic accidents noise and air pollution crime street vandalism, the breakdown of communities and difficulty and inefficiency in providing all local authority services as well as other services such as health and education And all that is not even to mention the economic costs of congestion in terms of lower productivity of both firms and individuals

We have abused our natural resources and we are increasingly doing so Ironically, the last few years of economic growth by increasing pressure on all those resources have exacerbated rather than cured the problem Gradually everyone is coming to the realisation that an increased standard of living on its own cannot deliver a better quality of life and that unsustainable economic growth can actually reduce our ability to enjoy the fruits of that growth

Quality of life is what we all want whether we are from Dublin or any where else and the quality of life is what all of us in our different ways as planners politicians public servants would like to deliver That we haven t been able to do that satisfactorily is reflected in the growth of pressure groups small parties single issue interest groups as we all cast around for someone or something to blame We blame crime poverty the breakdown of the family drugs traffic jam pollution Of course it isn t any one of these things but all of them and their interrelationship that is wrong with Irish life Agenda 21 won t cure all the pain of the human condition but it can make an enormous contribution in bringing about a more civilised and more civilising way of life for everyone

If we accept that Agenda 21 is a good thing and something we wish to pursue at local level then how do we go about it? The first thing is to realise the enormity of the task it would be very easy to underestimate this and assume that Agenda 21 is a nice environmental message that the public will clasp to their bosom immediately The reality is that Agenda 21 is not only a very complex message it is undeniably also a difficult message for the public to accept because for almost everyone the transition to real sustainable development is going to cause social and economic pain

For some it will mean the devaluation of their land For all of us it will cause inconvenience We will be obliged to make changes in our buying patterns to reduce packaging to use more indigenous materials we will be obliged to sort and recycle our waste and more of it as time goes on We will have to switch from private to public transport These changes along represent fairly major transformations of our lifestyles It will involve us all in additional expense too the producer in making the change to cleaner technology the consumer who will ultimately have to pay for it and to society at large who through the tax system will have to pay for the delivery of sustainable public services

In the preparation of our Development Plans certainly in the densely populated areas it means conserving what little green lung we have by achieving higher densities and by use of in-fill development It means persuading developers and buyers that quality housing no longer means half acre sites It means persuading architects to use all their ingenuity and skill to design housing which makes the best use of shelter orientation energy efficient technology and indigenous materials as well as providing usable imaginative open space compatible with the public s aspirations and do all of

that on much more constrained sites. It means promoting mixed use development, even in existing residential areas so that increasingly people can live and work and play within their community, so as to reduce dependence on private transport. I wouldn't think that even that will gain easy acceptance, given that currently, most residential communities regard even something as innocuous as a play school, as a threat something akin to an open sewer

If the first thing we have to remember is that it won't be easy, the second thing is that it can't be imposed

Some sustainable practices will come to us by way of legislation, and some we can encourage ourselves through the imposition of eco-taxes or through a pricing mechanism for instance to encourage recycling, or to discourage water waste Incidentally this is another good reason why the ability to impose charges must be left with the local authorities

While undoubtedly a certain amount of change of practices can be affected through legislation and through pricing if we are to be truly successful in attaining sustainable development it is actually an attitude change we need so that not alone will we accept the demands of Agenda 21 we will insist on them actually clamour for them, and accept nothing less. What needs to be achieved is a situation where legislation is unnecessary for instance to stop us watering our lawns with treated water. We need an attitude change which would regard this as such a public sin such a crime against the community that no one would ever dream of doing it

Agenda 21 undoubtedly has huge potential for improving the quality of life for us all but unless everyone is persuaded to that so that the process of pursuing sustainable development itself becomes sustainable almost organic then the next 20 years local government will become a battlefield of continuous clashes between the public and their County Councils. At that is not a prospect that many of Councillors would relish

The major role for Councillors must be the marketing and presentation of Agenda 21, otherwise it will be an uphill struggle every step of the way

Agenda 21 is a difficult message and many of the concepts underlying it are quite complex but the primary aim of Agenda 21 is so positive and has such an inescapable logic that it can and indeed must be presented in a positive way which highlights the immediate benefits and advantages so that the changes are not just accepted but are compelling

It is wrong to give the impression that we are not all concerned about the environment We are of course concerned about climate change and the depletion of the rain forests and we all see the benefits of a cleaner environment but actually translating that concern in to immediate action actions which may cost us money and inconvenience is another thing altogether. We are after all only human. We require to see immediate positive personal gains in terms of better health better neighbourhoods improved housing cleaner air jobs which can be sustained before we make major changes in the way we run our lives

Unfortunately in a number of ways Agenda 21 has got off to a very bad start in marketing its positive message

Firstly, the impression has been given that Agenda 21 is all about saving the environment You might ask what is wrong with that Well a number of things, the first being that it is wrong Agenda 21 is about people The environment itself is of concern, but only insofar as all human activity changes it and those changes can have a negative impact on people on people here in Ireland people in other countries and on future generations

A further flaw with this idea is that it pigeon-holes Agenda 21 - it makes it the property of the County Council s Parks Department and maybe of Environmental Services but for the wider community it is really only for environmentalists to concern themselves with whoever they might be If this idea were to take hold, it will be the kiss of death for Agenda 21 The essence of Agenda 21 is that it is holistic in its intent It has as much relevance for the iron and steel producer as it has for the organic gardener as much relevance for every producer, manufacturer developer every business person as it has for every consumer because each and everyone of them is a consumer of resources

Whether we recognise it or not there is a view that whole the environment and its protection is a very nice thing to be concerned about, it comes well down the list of priorities - after we have dealt with the really important things like the economy growth and investment This point was made during the recent American Presidential campaign when President Clinton was accused of campaigning on the soft issues like women s health education and the environment The implication being, of course that he was ignoring the mainstream economic issues Unless Councillors, get across the fact that sustainable development is a mainstream economic issue, it will always remain a marginal issue low in the order of priorities for attention

Secondly, we have got off to a bad start in the kind of language which surrounds sustainability issues Some the language used particularly if the concepts underlying sustainability or not perfectly understood can send a negative message and in particular it may frighten off the business community

All of us were brought up in a world which believed that economic growth and increased consumption were good things something we all aspired to so inevitably when Agenda 21 talks about reduced consumption growth restraint the limited carrying capacity of the environment it suggests reduced standards of living, a diminution of our quality of life

Agenda 21 is about precisely the opposite' Agenda 21 is about changing the pattern of growth and consumption but only to ensure that we can continue to enjoy the fruits of growth and to provide a better quality of life Again it is the positive message that we must stress Similarly the increased use of technology can increase the carrying capacity of our environment Local authorities have in fact been doing this for years, for instance in providing sewage disposal to cities and towns and by exploring new and better ways of treating sewage

Thirdly, Agenda 21 has to a certain extent tried to bring about a change in peoples' attitudes by making them feel guilty guilty for the loss of the rain forests guilty for consuming resources on future generations guilty for climate change, guilty for driving cars, for waste etc All this may be true but it is not a good way to change attitudes

Guilt makes people defensive it does not make them co-operative If we needed proof of that we need look no further than the current *Luas* controversy The question was raised about is effect on reducing car space on city streets and we were told that was the object of the exercise because there were too many cars on the streets Immediately everybody became defensive started talking about the amount of car taxes we were paying and about our right to drive where we liked A good positive message about the benefits - lower toxic emissions better health greater safety, fewer accidents greater inter personal and community contact, time savings not to mention a reduction in road rage - might have struck a more co-operative chord in everyone

Fourthly, There is a very real danger of becoming too doctrinaire, in either the selling of or the implementation of Agenda 21 There is no 'right way' or clearly established route to sustainability that applies to all places at all times Agenda 21 simply a process which tries to integrate notions of sustainability as we know them now, into everything we do

How we do that will be different in Dublin from Monaghan, it will also be a process changes over time as the problems change as our thinking changes and of course, as technology changes For example the Dublin local authorities are currently planning to bring our waste to landfill in Kill County Kildare and we are trying now to make that as sustainable a practice as possible by encouraging waste reduction at source and by facilitating recycling and reuse but I have no doubt that the next generation of disposal practice in Dublin will be incineration of waste to energy

At present incineration is a bad word and given all the nonsense recently even a small quantity of hospital waste we are a long way from gaining public acceptance of it However it does seems to me that in the long run it will be regarded as a totally unsustainable practice to collect waste to use energy to compress and bail it, and more energy to transport it to Co Kildare and then to bury it at a cost of £40 a ton Even when we have reduced waste to a minimum and then recovered and recycled all we can what we have left is a potential resource which could reduce our use of fossil fuels reduce our import bill and our national electricity bill as well as taking trucks off the roads thereby making them safer and reducing emission levels As incineration technology becomes better at reducing emissions this option is increasingly been chosen by countries which are at a much more advanced stage of Agenda 21 than we are

Agenda 21 will not be an easy message to sell nor do I look forward to being the person to have to sell it but if we are serious about Agenda 21 that is the kind of job which increasingly will fall to the local Councillor

Agenda 21 will make demands on everyone but on no group will those demands be greater or more immediate than on the local councillor If Councillors are to meet that challenge by giving the lead in Agenda 21 by being un-ambivalent in our commitment

to it and by demonstrating the best possible sustainable practices in the delivery of our own local authority services then I believe, we could go a long way in re-establishing local government, in the eyes of the public, as being at the very centre of guaranteeing, and delivering a better standard of living and a civilised and civilising quality of life

COMMUNITY PARTICIPATION IN LOCAL AGENDA 21.

Dr. Sue Christie

INTRODUCTION

Local Agenda 21 aims to change the way each and every person thinks and acts Local Agenda 21 is about delivering sustainable development locally

The terms " sustainability " and " sustainable development " are used glibly, we hear them frequently in the media, from politicians and even on the streets They are buzz words of the 1990's words that we had hardly heard before Many people have thought about the concepts embodied in these terms for many years but they have now become extremely fashionable This is extremely dangerous because they are truly revolutionary concepts and should not be devalued by overuse

The Earth Summit at Rio de Janeiro in 1992 was an extremely important and significant event for the entire world Nearly 200 leaders of government throughout the world signed Treaties committing their countries to working towards sustainable development The agenda devised at this Summit is comprehensive and extremely challenging It provides a direction for policy and action and a filter though which every single government policy funding package and activity should be viewed It requires a radical change in thinking and policy away from the current emphasis on economic and corporate growth towards an emphasis on environmental social and economic long term sustainability The implications of the treaty commitments agreed are so far-ranging and so fundamental that they should have impacts on the way every single person lives

If you ask the average person in the street what they know about the Earth Summit or sustainable development you will either get a blank look or they will say "that's about the environment isn t it' I m not sure to what extent the various world leaders who signed the document have a much better understanding of the ultimate implications of the Treaties that they signed Given that it is nearly four years on from the Summit we should now be seeing some major changes designed to counteract some of the global threats identified and to bring about the changes which were recommended So what has been happening?

GOVERNMENT'S RESPONSE

Firstly governments were required to prepare statements of how they plan to implement the Treaty. The UK Government duly prepared these plans which were published in January 1994 and it was one of the first countries to do so. These documents - and there are four substantial books on - *Sustainable Development Biodiversity Climate Change and Forestry Principles* - set out a comprehensive program for implementing the treaty commitments. They look at the current state of environmental issues within the UK the past trends in their development and extrapolate to what the condition would be in the future. There are occasional targets for improvement. There are many pious statements about things which should be improved and programs which will address the issues. It is a very *useful* document which states the problems clearly and presents policies which would certainly if implemented lead to a more sustainable global and local environment.

Secondly, in addition to these documents the Government set up a three tiered structure for delivering and monitoring progress towards sustainable development. There is a small high level Steering Group which reports directly to the Government. The second level is a larger Round Table which again has theoretically at least direct access to the Government. Finally there is the Going for Green initiative which is designed to promote sustainable development to the general public.

The Round Table has been addressing many of the important issues and making in some cases quite radical suggestions to the Government. Unfortunately the Government's general response to these has been a courteous thank you to the committee for their hard work and an avowal to consider their recommendations. The Going for Green initiative is essentially a publicity exercise which has identified a five point plan including reducing waste saving energy and natural resources travelling sensibly preventing pollution and looking at the local environment. Again a laudable initiative but there is little evidence of real effectiveness.

Thirdly, there has been the promotion of Local Agenda 21. In accordance with the agreement of the Earth Summit there is to be promoted by and through the local authorities and other major groups. It is designed to implement the principles of sustainable development at a local level by addressing people directly.

The UK Government seems to be largely delegating responsibility for implementing Agenda 21 to the local authorities. By delegating to local authorities the control of Local Agenda 21 it is making them responsible for the implementation of one of the most important treaties and policy initiatives of the twentieth century. There has been minimal additional funding and very little new legislation to ensure that the Authorities have the resources and powers necessary to ensure that the program is a success.

HAS IT BEEN EFFECTIVE?

How effective has the Government's response been? Has there been a major change in public opinion? Are lifestyles changing to bring us more into balance with our environment? Are the values by which we judge things changing from the purely

economic towards the social environmental and long term? Is there more equity between the higher strata and lower strata within society or between the UK and other parts of the world? And if not, why not?

There has been a huge amount of words and many worthy statements made about sustainable development by the UK and other Governments. The problem is that these words have not been backed up by corresponding changes in action, changes in funding priorities or real changes in policy

Sustainable development has been relegated to being an environmental program with a limited remit. When it comes to conflict with other government policies, such as privatisation transport or industrial development the environment is almost always the loser

This is certainly not what is required to elicit the changes that will bring sustainable development. We must have real changes in policy, real changes in actions and very different funding priorities if we are to see a society moving towards a truly sustainable future. If not we will continue along the very slippery slope towards serious environmental and social degradation

However at least now we have policy commitments that the Government is in favour of environmental protection and sustainable development and we have recognition that environmental problems and the way we live today are probably not sustainable in the long term or on the global dimension. Perhaps not what many of us had hoped for back in 1992 but still a definite gap forward from where we were at that time

CURRENT STATUS OF AGENDA 21

So where are we now with Local Agenda 21? Firstly, what exactly do we mean by Local Agenda 21? It is, quite simply, the delivery of the 'Agenda for the 21st Century' at the local level

Local Agenda 21 is

● **Working towards sustainable development**

It concerns what people can do at a local level to ensure that their own quality of life does not have adverse effects on the quality of life of other people in far away places or in future generations

● **It is about connections**

It is designed to help people to recognise the linkages between health, environmental issues, economic and social factors and how these all interact to lead to their overall quality of life

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- **It is holistic**

  It is about looking at all the factors which effect and are affected by our attitudes, activities and behaviour. It is about looking at the social environmental and economic factors of each and every decision that each one of us makes

- **It is a process**

  It is about involving people in developing policies and in determining their own and their children's future in a very positive way and at a local level. It is about changing the role process and perception of local government and local decision making. It is not just a single program or project

- **It is about partnership**

  It is a partnership between the citizens and their government, a partnership between voluntary organisations and statutory ones, a partnership among different groups all working towards a common goal of improving local communities' quality of life and developing an action plan in order to deliver this goal

- **It is about ownership**

  It is about helping people truly understand that they are stakeholders in all aspects of their community and that they have a vital role in influencing their own lives, their own quality of life and they way in which they are governed. It is about taking that ownership and asserting it to ensure that people feel empowered and are therefore willing to act. It is about helping people to take control of their own lives in a responsible way

- **It is about understanding**

  In order for people to act they must first of all, understand that there is a need for action. If they do not understand how their activities affect other parts of the world or their neighbours, then it is impossible for people to understand why they must change the way they have acted in the past. Not only must people have the information on which to base their decisions, they must also have the education necessary in order to interpret that information

- **It is a tool**

  It is a mechanism by which we can all analyse activities and policies to ensure that they are working towards the common good

- **It is about integration**

  Integration must be at a variety of levels integration among the departments within a Council integration between the school and local community groups, integration between purchasing decisions and their environmental effects Perhaps most importantly of all it is about the integration of policies across all areas to ensure that we do not have an environmental protection policy being promoted by one department which is being directly contravened by a transport or energy policy being promoted by another branch of the same government or local authority

- **It is about democracy**

  The goal is to bring about a system in which people have control over all aspects of their life through the democratic process It aims to involve people in controlling their lives By giving them the information and education necessary to make informed decisions Local Agenda 21 hopes to encourage people to make those choices which are in their own and their descendants' long term interests

- **It is about planning**

  Thinking ahead, devising and working towards a future which is in the best interests of current and future generations

The planning system can be an incredibly strong force in promoting sustainable development It can, equally be a force inhibiting its implementation if the structures, policies and implementation are geared differently The importance of planning in sustainable development or environmental sustainability was brought home to me very graphically over the past couple of years while working on the *Environmental Strategy for Northern Ireland*

ENVIRONMENTAL STRATEGY FOR NORTHERN IRELAND

The members of Northern Ireland Environment Link (NIEL) felt it was important to have a document from the voluntary sector which looked at issues of environmental sustainability and how they should be progressed in Northern Ireland Accordingly a couple of years ago the membership of NIEL decided to produce an environmental strategy

Production of the document took nearly two years involving drafting by member organisations followed by a major public consultation exercise The first outcome of this process is a book entitled the Environmental Strategy which was produced this May It presents visions for Northern Ireland's future assessments of the environmental issues facing the province and 290 recommendations on how the vision

of a more environmentally sustainable future can be brought about through changes in public attitude and behaviour in government legislation and policy and through direct practical or campaigning action by member organisations

During this process planning emerged as a vital determiner throughout all aspects of strategy assessments. We produced a summary document which highlighted 20 specific practical issues that should be implemented immediately. Four of these relate directly to changes in the planning system and its implementation. Another half dozen relate more indirectly to the function of planning

PLANNING AND AGENDA 21

At present the DoE in Northern Ireland is sponsoring a review and consultation process about a planning document that they have produced regarding the future development of the Belfast region

This process is rather a revolutionary one for a Government Department, since it is built along the same lines as our environmental strategy, that is preparing a long term vision of the area and devising recommendations as to how that vision should be obtained

One of the working groups for this document, the Environment Ecology and Quality of Life group, recognises that planning has a crucial role in bringing about more sustainable lifestyles. Energy transport the effects of the increased use of information technology, open spaces, aesthetics etc - all of these can be greatly influenced by planning

Examples of how planning has an absolutely vital role in promoting sustainable development and therefore is crucial to implementing Local Agenda 21 are

> By organising new developments and improvements in old developments away from current ideas of dormitory suburbs feeding into commercial centres (where all services are located) towards a system where there are local communities with housing schools health centres shopping facilities and work and recreation facilities it would be possible to

greatly decrease the amount of private transport required and energy used

> By encouraging people to walk and use bicycles on the short journeys to their local services huge strides can be made in reversing the trends in car traffic journey leading to excessive amounts of pollution, crowding on the roads and energy consumption

By helping the community to become more involved in planning for their future development it will be possible to help them to realise the importance of their own role as individuals and collectively in the Local Agenda 21 process. Planning is one of the areas where people are already involved in their local community and feel that they would like to have an important input. This concern can be harnessed and used as a base from which to initiate further involvement and action

AGENDA 21 IN NORTHERN IRELAND

The lead body on Local Agenda 21 is generally supposed to be the local authority and its networking organisation. This has worked very well in the UK where the Local Government Management Board (LGMB) has taken a lead role and helped to co-ordinate activities and provide much excellent information to the individual local authorities. Unfortunately the situation is somewhat different in Northern Ireland

- The powers of the local authorities in Northern Ireland are considerably different from those in other parts of the UK and in Ireland. Many of the functions that are normally dealt with by local authorities such as planning, education, health, environmental protection are dealt with by central government departments under the Northern Ireland Office. This means that many of the crucial aspects of Local Agenda 21 are not within the control of the local authorities

- There is no central body that represents all Councils such as the LGMB. The Association of Local Authorities in Northern Ireland, the official counterpart of LGMB has determined not to take a major role in Local Agenda 21, and crucially does not represent six of the Councils in the province for political reasons

- There is a lack of strong tradition of participatory democracy and community consultation within the local authorities

- There are 26 separate authorities in Northern Ireland and a co-ordinated approach by all of these is required is a co-ordinated approach to Local Agenda 21 is to be achieved in Northern Ireland

- Local authorities in Northern Ireland have to date, accepted the concept of Local Agenda 21 as if it were a particular project and have designated existing programmes as 'Local Agenda 21' rather than adopting the process approach

For these reasons, plus the lack of significant resources being devoted to the implementation of Local Agenda 21 the Councils have not taken hugely pro-active roles in most instances to date

There are notable exceptions. Belfast and Fermanagh Councils have both embarked upon a strategic review and production of implementation strategies. Banbridge, Ballymena and Omagh are producing draft guidelines for preparing Local Agenda 21 Strategies which they will be distributing to all Councils in Northern Ireland before the end of the year

Many other councils are embarked in specific areas of activity (see Table 1). All Councils have now appointed Local Agenda 21 co-ordinators. For many of these

people this is an appointment of true commitment although for others they have simply been designated because of their job titles No-one has been appointed with this as their sole duty, although understand Belfast is shortly to appoint a Sustainability Officer for the Council

SUSTAINABLE NORTHERN IRELAND PROJECT.

The World Wildlife Fund-UK (WWF-UK) has been involved very heavily in the Local Agenda 21 program in Great Britain they decided about a year ago to expand their activities with a pilot Local Agenda 21 project in Northern Ireland

WWF-UK approached Northern Ireland Environment Link who were simultaneously looking at Local Agenda 21 implementation and preparing a bid for funding from the Peace and Reconciliation fund from the European Union Together we have worked up a program which is now ready to be launched

The first phase of the project involved a feasibility study funded by the WWF UK which has been completed This will form the basis for the project itself which will have staff in post from the first of January Funding for the project is coming from WWF-UK (£20 000 per year for three years) the Peace and Reconciliation Fund (£30 000 for two years) and Shell Better Britain (£10,000 for two years) additional funding is being sought from other charitable organisations further aspects of Peace and Reconciliation funding and from the private sector Initial staff for the project will include a Project Manager and a Project Facilitator

The Councils obviously must be a major partner in this effort and we have agreement for full partnership by the local authorities through the Environmental Health Officers group of the Local Government Training Group We have applied to them for additional funding

The project aims to assist local authorities and different groups within the community to work together towards sustainable development The project has three major areas of activity

Firstly the project will involve -

> at least four pilot projects per year involving community participation
> Communities will be identified who wish to become involved in projects
> promoting increased networking and involving all of the existing community
> organisations schools and other groups in an identified locality These people
> will be facilitated to work together to devise a vision and action plan for their
> area and then assisted with funding and liaison with both central and local
> government for its implementation It is planned that half of these programs
> will be initiated from the communities themselves and the other half from
> councils who have identified particularly enthusiastic communities in their area

Secondly, the project will involve:-

> assisting the local authorities in what ever way possible with their Local
> Agenda 21 activities. It will involve acting as a central repository of
> information and networking this information out to all of those involved. The
> aim is to provide a single point of reference so that activities and information
> on Local Agenda 21 projects and examples of good practice can be efficiently
> networked throughout the system.

Thirdly, the project will involve:-

> an intersectoral approach toward integrating all aspects of government,
> voluntary and private sectors in Northern Ireland in the Local Agenda 21
> process. To date there has been relatively little acceptance by central
> government that it has a major role to play. The Environment and Heritage
> Service have given a commitment of that if the local authorities act as a lead
> they will be willing to support their activities, hopefully this means financially as
> well as with fine words.

SUSTAINABLE NORTHERN IRELAND PROJECT.

KEY AREAS, STRATEGIC MANAGEMENT AND OBJECTIVES.

1. PILOT PROJECTS.

**To identify eight pilot projects (four originating with local authorities,
four with the community) reflecting geographical and rural/urban
balance for extensive assistance during the two year project.**

> To work with four community consortia and councils in
> developing pilot projects in year one, and to have worked
> with eight projects by the end of the second year.

> To assist the pilot projects to develop visions and agreed
> action plans for sustainable development and to begin their
> implementation.

> To assist pilot Councils to produce sustainable development
> and community participation strategies.

> To provide relevant training for the pilot project consortia and
> Councils to enable their projects

B. **To identify additional Councils and community groups for second phase intensive work and general assistance during the first part of the project.**

   To inform the councils and community groups of the project through the SNIP Newsletter and invite their participation.

   To provide information and assistance to councils and groups wishing to become more involved in Local Agenda 21 projects.

   To disseminate the findings of the pilot projects to other Councils and relevant community groups.

C. **To collect case study material for publication after two years.**

   To collect information on the progress of the pilot projects and additional Local Agenda 21 activity.

   To compile this information in preparation for the publication of a NI specific Local Agenda 21 action report.

D. **To obtain funding for the continuation of Local Agenda 21 and for the implementation of the pilot projects.**

   To follow up likely prospects and obtain sufficient funding to ensure that Local Agenda 21 activities in NI will received the resources required to make them successful.

   To obtain funding for Pilot Projects implementation.

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2. COUNCIL NETWORKING.

A. **To serve as a point of information exchange and dissemination on Local Agenda 21 in Northern Ireland.**

   To persuade and assist all Councils to develop sustainable development and community participation strategies.

   To keep Councils, government and sectoral partners informed of Local Agenda 21, to encourage their involvement and to arrange training if requested.

B. **To disseminate information on Local Agenda 21 progress and the progress of this project.**

To produce four SNIP Newsletters (every six months approximately) that inform and enthuse people about the Local Agenda 21 process.

To collect information on examples of good practice and disseminate to other Councils.

To provide advice and information on Local Agenda 21 activities and projects to all Councils.

C. **To identify training needs of key persons in the councils, community and support agencies.**

To facilitate the delivery of training as identified.

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3. **INTERSECTORAL CO-OPERATION.**

A. **To develop a strategy for involving other sectors (central government, business, agencies, voluntary groups etc.) to participate fully in the Local Agenda 21 process.**

To contact all relevant sectors, inform them of Local Agenda 21 activities, to discuss with them their role in Local Agenda 21 and to facilitate them in fulfilling that role.

To encourage them to be receptive to approaches from communities.

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4. **KEY BENEFITS TO PARTICIPANTS:**

Access to information on sustainability and Local Agenda 21.

Provision of training to meet needs.

Access to links and contacts.

Assistance with funding.

Raising of profile and the project through regional, national and international dissemination.

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5. PHASING

Year 1.

Contact 'short list' of councils and inform them of the project in detail and invite their involvement in the community involvement process as a pilot project.

Devise list of potential community groups to act as a 'core' for the community consortia via RCN, NICVA and other umbrellas organisations. Contact 'short lists' for expressions of interest.

Devise target group of four projects (preferably two council, two community) reflecting geographical, political and rural/urban spread.

Contact government and other sectoral groups with a role in Local Agenda 21 and inform them of the project, securing their support where possible.

Develop Agreements (formal for councils, informal for community consortia) for pilot projects.

Develop community consortia, consisting of from one to ten or more community groups including a wide range of interest groups in the local area and including the local school where practicable. Identify and deliver training needs. Involve intersectoral partners. Identify and apply for funding.

Develop council community involvement initiatives and facilitate them through providing training to officers and members.

Identify funding sources for projects and assist them with obtaining project funding.

Maintain information on Local Agenda 21 initiatives in Northern Ireland and elsewhere and act as a point of information for exchange of this information.

Provide information on the progress on pilot projects and other Local Agenda 21 initiatives in Northern Ireland through the Newsletter.

Encourage involvement in Local Agenda 21 projects and adoption of sustainable development strategies, preferably involving community participation, by all councils.

Year 2.

Identify and work with second group of pilot projects (two to four additional projects).

Continue work on areas 6 - 11 above.

Compile information to provide basis for NI specific publication on pilot projects.

Obtain funding for the continuation and expansion of the project.

The Sustainable Northern Ireland Project is a major opportunity for Local Agenda 21 and for to working towards sustainable development in Northern Ireland. There is a good base of information and enthusiasm from a wide range of individuals and organisations. There is a huge and ever growing community sector in Northern Ireland, fuelled partly by availability of funding, and it is hoped to build on this base to bring about the objectives of Local Agenda 21.

It too early to determine whether the Sustainable Northern Ireland Project is enough to bring about the major changes required to approach, never mind achieve, sustainable development? It must hoped so. It is a huge task, and there are many factors working against it. If the attempt is not made it will surely fail, to the certain detriment of future generations and probably to our own cost as well.

Small changes many seem insignificant, and the biggest challenge of Local Agenda 21 is helping people to understand that their own actions do make a real difference. If we all act together we can cause major changes. It is our duty to do what we can, as individuals, as policy makers and as influences of public opinion, to help people understand why action is important and to know what actions are appropriate.

Table 1   Local Agenda 21 Activities of Councils in Northern Ireland.

	Actively Involved	Developing approach	Little happening	Need more information
Internal Environmental Assessment	1	10	15	0
Environmental Awareness/ training	9	15	1	1
Energy Conservation	5	21	0	0
Waste Management Strategy	8	18	0	0
Recycling/ waste minimisation	7	19	0	0
Environmental quality and health	26	0	0	0
Action strategy	0	6	20	0
Environmental network/forum	1	6	19	0
Local Agenda 21 programme	0	15	11	0
Environmental management systems	0	14	11	1
Community participation processes	0	14	11	1
Environmental Charters/ policies	2	13	11	0

LOCAL AGENDA 21 AND THE DEVELOPMENT PLAN A CASE STUDY OF A MEDIUM SIZE TOWN.[1]

Hendrik W. van der Kamp

INTRODUCTION.

The issue of sustainable development has received considerable attention at all levels of policy making At European level the principles have been clearly identified in major documents such as the Green Paper on the Urban Environment (CEC 1990) and the Fifth Environmental Action Programme while the implications for spatial planning have also been considered in the publication European Sustainable Cities (EC 1996). At national level the Government is preparing a National Sustainable Development Strategy and Sustainable Development guidelines have been issued (DoE 1995). At local level, local authorities are asked to prepare local agenda 21 policy documents

It is not intended to refer to these and other policy documents and their implications for planning. They have been discussed elsewhere (van der Kamp 1996). instead, this paper seeks to address the very practical ways in which physical planning can make a contribution to sustainable development This is important because the very concept of Local Agenda 21 is that action to achieve change towards more sustainable types of development must include action at local level. The contribution of the planning department in each local authority to the overall Local Agenda 21 policies is in my view, crucial and the physical planning policies could adopt a lead role in this

There is one very good reason that this should be so. That is the development plan The development plan is multi-dimensional and must integrate and balance social, economic and environmental considerations. Because local planning authorities must adopt and review development plans, the very concept of Local Agenda 21, i e the integration of economic, social and environmental sustainability, is already firmly established in the approach of the local planning department. Physical planning requires consideration of all sectors of development and the 'proper planning and development' includes the economic and social as well as environmental improvements of an area.

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[1] This paper is based on a project carried out by postgraduate students in Urban and Regional Planning at UCD whose contributions are gratefully acknowledged by the author.

PRACTICAL ISSUES.

The most recent comprehensive guidelines for urban development plans (DoE 1983) are more than ten years old. Clearly, an update of practical advice to local authorities is needed to show how planning can contribute to sustainable development, while practical advice is being developed (see for example: Local Government Management Board, 1995) it is important to develop guidelines that are relevant for the Irish Planning Practice.

In the Department of Regional and Urban Planning, an urban development plan project was carried out for Swords (approx 25,000 population). The project brief for the students was to prepare a development plan which was based on the principles of sustainable development. As such it is a 'demonstration project' the importance of the project is not to obtain a development plan for Swords, but rather what kind of policies could be considered in a development plan for a town like Swords if sustainable development principles were adopted as a starting point. It was hoped that such a demonstration project could provide useful indication of the type of policies leading to sustainable development that could be considered in development plans for medium size towns. The project forms an element in continued research within the Department of Regional and Urban Planning into the relationship between spatial planning and sustainable development.

POPULATION SIZE: SUPPLY LIMITED OR DEMAND DRIVEN?

An important question facing any planner who has to review a development plan for a town, is the adoption of a population projection. Traditionally, we have approached this from a 'demand driven' perspective. This means that the likely increase in population is estimated on the basis of assumptions regarding natural increase and migration. However, it is arguable that sustainable development principles require a different approach. Perhaps growth should be 'supply limited' rather than 'demand driven'. This might mean, for example, that a particular town would be targeted for a certain population size based on the principle of the carrying capacity of the environment in question. If such limits are exceeded, this might mean that further population growth would be 'unsustainable'. Most often such carrying capacity limits will be determined by the available infrastructure.

In the case of Swords, such a limit appears to be obvious in view of the severe problems with effluent treatment capacity. Improvements in the capacity of sewage treatment facilities usually have a " lumpy " character. This means that when additional capacity is provided it does not happen gradually in proportion to population growth but instead sudden increases in capacity occur as new infrastructure is provided. As a result an improvement in the infrastructure may change a situation from where there is no capacity for any additional population, to one in which significant growth could be accommodated until such time population growth give rise to a new limit. It was decided by the students in the case of Swords, that once the sewage treatment problem is solved, the additional capacity created should be used to the full benefit of the town and further expansion should be allowed, provided that a

limit in population size is set in order to avoid a situation where deficiencies would again occur at a future date

The idea behind a target population rather than a 'projected population' is therefore not that the town should reach a certain size within 5 10 or 15 years, but rather that the development plan should be produced with this figure in mind The significance of this is that development of infrastructure industry housing and amenities are all guided by this figure This can result in avoiding a situation where there is a deficiency in the infrastructure or where there is an over-provision either of which is arguably unsustainable Restrictive planning policies prove difficult to implement in practice when an overcapacity in infrastructure exists equally a deficiency in infrastructure can lead to undesirable polluting effects

Adopting a population target approach is in this case based on sewage treatment capacity but may in other cases be based on the shortage of acceptable lands for development the limits imposed by major physical barriers in the landscape (e g a motorway or river) or the fragile character of a heritage town centre What is important is that such a policy is only feasible (and reasonable to local population) if adopted in the context of a regional population allocation plan Adopting a population target or limit for a town without such a regional context would be unrealistic because of the fact that people must be provided with a place to live However, it does not mean that such a regional policy must necessarily be 'top-down' Adopting the supply limited approach rather than the demand driven approach may mean that population allocation policies are derived from locally based 'bottom up' proposals for town population growth The idea of a population target of 40,000 people adopted in the Swords study was based on such an approach

OPEN SPACE

Sustainable development is about improvement of the quality of the environment In relation to natural resources (soil flora and fauna) there are clear problems Improved links between the urban areas and the surrounding countryside and the promotion of more green spaces that are in a natural or semi-natural state are policies to be advocated because we continue to experience a loss of undeveloped land and habitat degradation as a result of mono-culture urban green areas (EC 1996) Here, the development plan can make a meaningful contribution by re-examining the traditional development control policies on open space Traditionally development plans set standards for open space based on a certain number of square metres per capita and the distinction between different types of open space (see box) Is this the most effective way of improving the quality of the environment? Instead of a minimum area per inhabitant perhaps a different standard could be adopted that of a maximum distance to an area of open space from the dwellinghouse This would mean that residential environments offer open space in immediate proximity instead of a hierarchy of rather cultured (and in practice frequently sterile) open space areas Perhaps the principle that these areas of open space should be semi-natural in character should be adopted If we could achieve both of these objectives the development plan would ensure that all residential areas would be in close proximity to countryside

Such a policy would clearly be a policy of 'greening the town' by increasing the links between the urban area and the surrounding countryside. However, apart from these benefits it would also achieve an important other dimension of sustainabiliity: that of social equity. Clearly a planning standard aimed at achieving a maximum distance from all dwellinghouses to areas of semi-natural open space, would contribute to the social equity principle.

Open Space Standards

Existing development plan standards:

Minimum 2 hectares per 1000 population to be provided as:-

  a 16 hectare neighbourhood park for 10,000 population;

  four hectares of local parks strategically distributed in relation to layout design in areas in general not less than 0.4 hectares in area;

  additional areas of environmental open space throughout the housing area.

Proposed development plan standards:

Designated areas along the urban fringe to be developed to include active and passive recreation (playing fields, allotments, public parks)

Green system of 'wedges' of green space and linear park with open spaces connected

An urban resident should be able to enter a 'natural' green space of at least 2 hectare in area within 0.4 km of their home (equivalent to approx. 5 mins. walk).

Obviously, as a town gets larger, it becomes more difficult to achieve significant areas of semi-natural character that are also in close proximity to residential areas. If however, the edge of the town and green wedges reaching into the centre of the town can be used, it becomes feasible.

URBAN EDGE AND GREEN WEDGES.

The edge of a town and interface between the built up part of the town and the undeveloped rural area, is often extremely poor in quality and definition. This is partly

the result of the fact that the edge keeps moving as new development takes place
Where there is agricultural development there are often problems of encroachment of
urban use into the agricultural area which can result in problems of vandalism and
piecemeal and ad hoc development   Swords is no exception in this.   Urban
encroachment into the rural area to the east of the town could lead to the gradual
erosion of the identity of the town as distinct from Malahide   To the west and north
west, the interface between new housing developments and the adjoining countryside is
frequently of a stark nature   The areas immediately adjoining the built up area are
vulnerable to trespass and vandalism and thereby less suitable for agriculture use.   At
the same time these areas are potentially very accessible from residential areas and
have potential use for more intensive use in the area of sport, recreation and
environmental improvement

Traditionally, this 'edge' or 'fringe' between the built up area and surrounding
agricultural land, is constantly changing as new greenfield development takes place If,
however, this line between the built up area and countryside could be defined on a
more permanent basis, it would become possible to identify and plan for an area of
open land immediately adjoining the urban edge, which would constitute the type of
open space required   In order to improve access to this zone, it might be desirable and
practical to integrate it with the normal open space areas within the housing estates at
the edge of the town   This green zone could be used for allotments for vegetable
growing, recreational uses etc   The provision of such open space along the fringe of
the town could act as 'buffer zones' to protect agricultural land from urban intrusion.

This principle could be carried further in Swords if this green zone could then be linked
up for example, with the River Valley Park   This area of green space reaches from the
outlying countryside right into the centre of the town   As such it forms a wedge of
open space, which, in combination with the green zone at the edge of the town, could
achieve the objective to provide semi-natural green space areas in close proximity to
residential areas, even those in the central part of the town   As a result we can see the
provision of green areas, of open space, as a network of areas linked together   What
does this mean for day to day development control? For example, it would mean that
even small areas of public open space within housing estates should be located in a
manner that these can be integrated into this network system of public open spaces that
runs through the town

ECOLOGICAL CORRIDORS OR NETWORKS.

The process of fragmentation of pristine natural or semi-natural ecosystems is
recognised as one of the major causes of the decline of biodiversity   The frequent
absence of a species from suitable habitat patches is a manifestation of the impact of
this fragmentation   Habitat fragmentation also reduces the species' resilience to
environmental stress (IBN-DLO 1996)

The concept of ecological corridors is to halt and reverse this process of
fragmentation   *Ecological corridors* facilitate exchange between nature areas   They
can consist of whole landscapes, large stepping stones such as wetlands, natural
elements in agricultural landscapes such as wooded banks, small forests, streams and

ditches and artificial passages The optimal shape and location of ecological corridors depends strongly on the species or species groups for which it is thought to function (Jongman 1995).

It is important to realise the extent to which physical planning can contribute to achieve ecological networks It is also important that these must be seen as integrated from local level up to international networks   Ecological networks have been developed in several European countries The European Union has also accepted the concept in the Habitat Directive (its directive on nature conservation,) by establishing a Europe wide network for European nature conservation under the name of 'Natura 2000' (Jongman 1995) In the case of Swords, the green wedges that reach into the town and connect with the Estuary, form a good example of such a potential ecological network   At micro level the areas of ecological space at the back of the main street reaching and connecting with the green zones at the urban edge, but also connecting with the Estuary which is listed as national heritage area   What is of interest is that these green wedges are already established, but that planning policies can be used to further strengthen these by selection of areas for future housing development and the zoning policy for the green areas at the edge of the built up area

MULTI-USE OF GREEN WEDGES.

It is clear that the 'urban edge and green wedge' design principle (which must be implemented by development control policies, and perhaps some land acquisition) serves two planning objectives

(1) to achieve the planning standard of an area of semi-wilderness open space within walking distance from every resident,

(2) the improvement of bio-diversity by increasing integrated habitat areas

The green wedges become multi-dimensional in this sense but also in another sense; the large areas of green space within a town do not necessarily exclude other land uses

It was observed that existing clean industries located in the northern part of the town are situated in a 'parkland setting'.   Although the land is industrially zoned and owned by the companies, it appears to the visitor more as an area of parkland which stretches into the town as the green wedge, very similar to the linear park   Could such an example be repeated elsewhere? It can if we are prepared to change our approach as planners to the traditional zoning Land does not need to be industrial or open space, it can be both In this way one of the green wedges was in fact proposed to be zoned as an area for new industry subject to conditions on the type of industry and site coverage which would ensure a 'parkland character' of the industrial zone that would be of benefit to the whole town

Combining open space with industrial use has another interesting aspect, that is the management of the green areas It is much easier for a local authority to come to management agreements with large firms regarding, for example, tree planting, water management, use of pesticides, grass mowing regimes, etc It is reasonable to assume

that in many cases such a 'green image' would be of benefit and therefore carry the support of the management of these companies

DISTANCE TO TOWN CENTRE

Long distances between housing areas in medium sized towns and the town centre are not in accordance with sustainable development principles. At present Swords has developed in a westerly direction resulting in some of the newer housing developments being located a considerable distance from the town centre without adequate public transport which would normally not be viable in a town of such size. However, it is clear why development has gone west. drainage by gravity and the barrier formed by the existing by-pass to the east of the town form an explanation for this. At first glance it would appear therefore that development in eastern direction must be ruled out because of cost factors and to prevent isolation to the east of the by-pass

It was decided however that this would not necessarily be the correct policy and that proper development of Swords may require that the town will expand in eastern and south eastern directions. The fact that this may result in additional costs of servicing the land with drainage was seen as a necessary additional cost that should be borne in the interest of long term balanced development of the town. The fact that this also means crossing the by-pass was seen as an objection that can be overcome by reducing the status and character of this road which becomes possible with the construction of the new motorway further to the east of the town (see below)

URBAN BOULEVARD

It will not be possible to always achieve policies in a development plan that are in accordance with sustainable development principles. The demands for new relief roads illustrate this. such road proposals consume large amounts of land. create barriers in the landscape and generally result in visual impact. noise and sound pollution etc. However where such new infrastructures are considered necessary planning policy should aim to achieve the maximum benefit where this can be obtained

The Study concluded that the existing by-pass of the town could be 'downgraded' in the road hierarchy for the town when the new motorway to the east of the town is constructed. It would no longer be necessary to see the existing road as a by-pass or the main access road to the town. This role would be taken over by the new motorway to be constructed to the east of the town. The existing by-pass instead could become a local distributor road to the industrial estate and adjoining residential areas. With such a change in function of the road. a change in appearance could be considered. Such a change could include for example frequent pedestrian crossings. traffic calming measures. enhanced landscaping. changed street furniture and lamp posts. These measures would make the road much more permeable' to existing and future residential development on the eastern side of the road. A more balanced shape of the town could be achieved by developing land for housing to the east of the existing by-pass where traditionally all development has gone in a western direction

Notwithstanding the disadvantages regarding severance by the by-pass and the fact that the land in question could not be drained by gravity principles of sustainable development would require that people must be able to live at a reasonable distance to the town centre and that further development to the west should be ruled out Town planning policies should therefore be aimed to achieve this and to redesign the existing by-pass as a 'boulevard' within the town once the motorway is constructed

BICYCLE NETWORKS

It is well documented that particularly for the shorter distances the use of bicycle as a mode of transport should be considered as a major policy objective in traffic policy in view of the fact that many journeys are short journeys It is essential for cycling policies to be effective that any measures are placed in a overall framework In that regard the cycling study carried out for Fingal County Council by the Department of Regional and Urban Planning is relevant because it is an integrated plan for the whole town rather than isolated improvement proposals The survey showed that schools actually advise children not to cycle because it is too dangerous we therefore have a long way to go to achieve sustainable development principles

PERMEABILITY

Permeability is important to achieve increased use of bicycles and walking and to increase accessibility to open space Both are sustainable development objectives What is of interest is that both types of permeability are mutually compatible For example improved access from housing estates to the green wedges (ecological corridors) will also significantly improve cycling facilities in terms of shorter and more pleasant routes

At present poor linkages occur between the linear park and adjacent residential developments and associated open spaces Within the urban core a lack of permeability exists between the linear park with Main Street and North Street Similarly the Broad Meadow Estuary is easily accessed by only a small proportion of pedestrian visitors since it is separated by the Swords by-pass from the remaining greater Swords area Accessibility and enjoyment is further impaired through the provision of poor pedestrian facilities along the edge of the Estuary

Objectives and consistent policies can be mutually reinforcing Improved connections between areas of green space will reduce barrier effects and improve ecological networks but will also improve permeability for pedestrians and greater amenity facilities

Connections would be developed between the linear park and existing open spaces and adjacent land areas without damaging its amenity in order to make the park more permeable and enabling it to infiltrate the core of the town Landscaping techniques which develop ecological diversity and create new habitats should be developed

In addition to achieving maximum access to green wedges and the urban edge green zone significantly improved interconnections between housing estates would generally be necessary as part of an integrated cycling network

WATER MANAGEMENT

Another kind of permeability refers to the continued increase in hard surfaced areas and the resultant increase in surface water runoff There are sustainable options to deal with surface water run-off and to reduce the loading on sewage systems One such approach is to store storm water in a pond or depression in the land Storm water will be stored following heavy rainfall which will then be released slowly to a stream or directly to the water table The benefits of this are clear less loading on the piped sewage system increased opportunity for removal of sediments, (thereby reducing pollution of surface waters) and the creation of a potential recreation or visual amenity asset The loading of storm water on the sewage network can also be reduced by seeking to increase the amount of permeable ground cover By paving car park areas with permeable ground cover for example, one can reduce the amount of run-off

For new housing developments the provision of separate water pipe systems for white and grey water should be considered Re-using effluent from showers laundries, roof water etc for purposes that don't require drinking water standard (e g flushing a lavatory) can effect a significant reduction of water requirements The principle of using this grey water and the need to provide the necessary local infrastructure (such as separate piping systems and local storage reservoirs) are clearly planning policies that are directly of relevance for sustainable development

HOUSING DEVELOPMENT

The demonstration project has suggested that the most suitable pattern of residential development from a sustainable development point of view would be 'fingers' of residential development separated by green areas consisting of allotments, playing fields other community facilities and low density clean industrial development Combined use could be considered for recreational facilities within such green zones for the industry workers and the residents Within the fingers of residential development a variety of dwelling types should be the objective

RETAIL DEVELOPMENT

New retail developments must incorporate energy conservation measures, recycling facilities eliminate litter and generally protect and enhance local amenities The existing neighbourhood shopping centres in the town provide ways to achieve this While it may be difficult to make and keep neighbourhood centres sustainable in the face of new retail developments there is no doubt that the neighbourhood shopping centre makes a lot of sense from a sustainable development point of view This is clear because of the ability to walk to the shops home delivery services and also because

such neighbourhood centres can provide suitable local points for sustainable development practices such as recycling

However while Swords provides a good starting point in the number of neighbourhood centres that are already available the quality of these varies greatly Nonetheless additional neighbourhood shopping centres should be developed in areas where large scale residential development is proposed To ensure the retention of a compact retail core (which is important not only to achieve reasonable walking distances but also improve the attractiveness of the town centre) it is essential that further ribbon type retail development stretching outwards from both ends of the main street is avoided

WASTE MANAGEMENT

Local neighbourhood centres provide suitable locations for recycling facilities Traditionally bottle banks and other waste material facilities have been located in the car parks attached to such shopping centres In view of the fact that many trips to the shops will be by car the shopping car park seems the ideal place to locate expanded recycling facilities as this would normally not result in addition trips

In terms of recycling the development plan policies should also make a contribution to encourage composting of garden and household water This becomes more difficult with increasing densities of residential development and smaller private gardens

An interesting concept is making facilities available for the composting of organic waste in the green wedges in the town such as the River Valley Park Composted material could be used in the landscaping of the valley and such locations would ensure close proximity to housing development

Private recycling enterprises should be facilitated perhaps within lands zoned for industrial development

ENERGY

Waste-to-energy projects will undoubtedly become important elements of the waste disposal infrastructure To reduce our energy consumption (or perhaps rather to stop a further increase) and to change types of energy towards renewable energies, is another significant element in the sustainable development objectives In this area the urban development plan can do relatively little

Nonetheless each town should actively consider the scope for renewable energy types In this regard the Planning Guidelines for Wind Energy are useful (see IPI and DoE Wind Energy Guidelines) It was concluded that Swords has very limited potential for wind resource exploitation for a number of reasons -

- low average windspeed
  proximity to an airport

- proximity to a Special Protection Area (Broadmeadow Estuary),
- adverse visual impact on the town

CONCLUSIONS.

The Swords Study is a demonstration project, a case study based on a scenario approach of the ' what if ' type

What kind of development plan policies might be considered if sustainable development approaches underlying Local Agenda 21 are adopted as the main guiding principle?

Many of the ideas that have been explored and developed in this project, came from the interactive exchange of ideas amongst a class of young planning students One might wonder why this type of research should be done by newcomers to the profession rather than more mature planners It may well be the fact that these students knew a relatively small amount of techniques and approaches that are traditionally used by planners that contributed to some of the ideas in the project In my opinion it is the originality of thought of the newcomer to the profession that is required to get new and imaginative solutions to old problems

We currently live in a period where traffic calming measures in residential estates are common place I am reminded however of the origins of the traffic calming approach (van der Kamp 1986) In 1970 a local school in the Netherlands requested a fence to be placed around a play area because children sometimes ran into the road To the dismay of parents the local authority responded by planting six young trees on the roadway thereby effectively reducing the road width This was the unexpected answer of the officials to the problem of conflict between cars and playing children That was the start of the concept of the wooner!' that has subsequently been adopted and further developed It is innovations like that which we need for approaches in spatial planning that are aimed at sustainable development I hope that the Swords project is an example of practical research aimed to achieve such innovative approaches however modest they may be

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LOCAL AGENDA 21 AND THE DEVELOPMENT PLAN THE CHALLENGES FOR A MAJOR URBAN AREA.

John Haughton

INTRODUCTION

Local Agenda 21 and the Development Plan - The Challenge for Major Urban Area will examine

    (a)   what " sustainability " means,

    (b)   the issues covered by Agenda 21 and their inter-connectedness,

    (c)   the role to be played the Local Authority,

    (d)   the role of Planning,

    (e)   the shape of "sustainability" city,

    (f)   changes in attitudes, vision and life-style required to fulfil Agenda 21

    (g)   best practice in the operation of Agenda 21 in other cities.

In order to achieve various aspects of Agenda 21 a new type of Development Plan will be required, one designed with specific objectives and time-scales and which will result in new Development Control mechanisms

The Agenda 21 approach emphasises inclusiveness at all levels and the marrying of economic, social and environmental considerations

Various words have been used to describe the approach required to implement Agenda 21 including *holistic* and *synergistic* To be properly effective the local authority must re-condition the relatively disparate parts of it's corporate body as well as developing permanent fora based on real partnership with various other sectors, such as NGO's and local communities

Agenda 21 recommends that each local authority *enters into dialogue with its citizens local organisations and private enterprises*' and adopt a local Agenda 21 The EU recommends the setting up of an **Environmental Forum** to discuss and propose solutions to environmental problems and develop policies based on sustainability principles as a basis for the preparation of Local Agenda 21

AGENDA 21 - THE BACKGROUND

In 1992 the United Nations held a conference on Environment and Development in Rio de Janeiro, Brazil popularly known as the Earth Summit'
At this conference is One hundred nations including Ireland endorsed "Agenda 21" a blueprint for sustainable development for the 21st century

Agenda 21 is therefore the United Nations Action Plan to achieve global sustainable development It calls on local authorities throughout the world to set out their Local Agenda individually to achieve sustainable development objectives at the local level while at the same time each country would work individually and collectively to achieve the objectives of Agenda 21 The local initiatives being developed at the local authority level go under the heading of "Local Agenda 21" Sustainable development is about linking "local" and ' global" Over two thirds of Agenda 21 cannot be delivered without the involvement of Local Government

Agenda 21, a 700 page document is in effect an action plan to give effect to sustainable development principles working towards a blue print for the next century

The five Rio documents

Rio produced two international agreements, two statements of principles and a major action agenda on world-wide sustainable development The five are

- The Rio Declaration on Environment and Development Its 27 principles define the right and responsibilities of nations as they pursue human development and well-being

- Agenda 21 a blueprint on how to make development socially, economically and environmentally sustainable

- A statement of principles to guide the management conservation and sustainable development of all types of forests, which are essential to economic development and the maintenance of all forms of life

Two major international Conventions were negotiated separately from but in parallel with preparations for the Earth Summit and were signed by most governments meeting at Rio

- The aim of the United Nations Framework Convention on Climate Change is to stabilise greenhouse gases in the atmosphere at levels that will not dangerously upset the global climate system This will require a reduction in out emissions of such gases as carbon dioxide, a by-produce of the use of burning fuels for energy

- The Convention on Biological Diversity requires that countries adopt ways and means to conserve the variety of living species, and ensure that the benefits from using biological diversity are equitably shared

BIOLOGICAL DIVERSITY

The United Nations Convention on Biological Diversity states that the world's biological diversity, i e the variability between living organisms, is valuable for ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic reasons The diversity is important for evolution and for maintaining the life-sustaining systems of the biosphere The conservation and sustainable use of biological diversity are of critical importance to meet the food health and other needs of man

Man depends on the variety and variability of genes species, populations and eco-systems Biological diversity is eroded by the utilisation of land for other uses, habitat destruction over-intensification in farming the use of insecticides and fertilisers pollution and the introduction of non-native plants and animals The value of biological diversity cannot be under-estimated for example In 1960 a child suffering from leukaemia had only one chance in five of survival now due to the discovery of the curative properties of the Rosy Periwinkle" a tropical forest plant found in Madagascar, the child has four chances in five of survival

A diversified approach applied to planning means a move away from the mono-culture ethos to one based on policy changes such as replacing zoned uses by mixed uses, car dependence by change of mode single tenure estates by mixed tenure, sterilised species by biological diversity poor environments by local/regional diversity

The main global problems identified are -

(a) global warming

Global warming caused by present day lifestyles will result in catastrophic effects represented by serious weather changes Increased violent storms cyclones etc flooding, increased desertification, water shortages, habitat and destruction of species A major cause of global warming is the rate of CO_2 emissions Changes in energy use can reverse the process e g use of natural gas causes 50% of the CO_2 emissions caused by of electricity

(b) the destruction of the ozone layer

The experts of the United Intergovernmental Panel on Climate Changes have determined that the world's total carbon dioxide emissions must be halved in the next 40-50 years to combat the greenhouse effect The planet's stratospheric ozone layer continues to decline because of releases of CFC s halons and other substances containing reactive chlorine and bromine

At the outset it is important to realise the interconnectedness of the various considerations of Agenda 21 the principles of sustainability and the synergistic benefits of considering the many elements in relationship This makes it imperative that the Local Authority's approach must be a corporate one with input from the various departments

To illustrate this one can take the subject of atmosphere climate and carbon fixing The Framework Convention on Climate Change deals with maintaining or increasing the capacity of what are generally described as carbon sinks But although soil is the major carbon sink man can most effect increased capacity to absorb CO by planting trees and other vegetation This brings together measures of reducing emissions from vehicles and other sources of CO (e g burning coal wood etc), reducing the number and length of car and other vehicle trips and the planting of trees Several departments of the local authority therefore must work together to effect maximum benefits in reducing CO. levels

The Government Guidelines on Local Agenda 21[1] state that the development plans of the local planning authorities are the principal policy statements on land use and land use policy and controls are a critical means of ensuring sustainable development

Promoting Tree Planting, Bio-diversity Together with Habitat Preservation Enhancement and Creation

The importance of trees tree planting and urban forestry resulting from Agenda 21 cannot be over-emphasised It should be pointed out however that degradation of other habitat (e g heathlands and wetlands or flora which should be preserved and are not shade resistant) should be avoided The role of trees includes considerations relating to

> **Acting as a carbon sink (i e reduction of CO_2 levels**
>
> **Reduction in pollution e g. Airborne dust particles;**
>
> **Removing particulate pollution from the air (75%);**
>
> **Provision of oxygen to the air,**
>
> **Shelter and shelter-belts,**
>
> **Aesthetic and visual,**
>
> **Crafts development,**
>
> **Building construction;**
>
> **Reducing heat loss from buildings (up to 15%);**

[1] Department of the Environment 1995 Local Authorities and Sustainable Development Guidelines on Local Agenda 21 Dublin

Enhancing wildlife diversity,

Enhancing recreational potential,

Economic value,

Climatic control;

Recreation

While the burning of fossil fuels is the major cause of increased CO_2 emissions (resulting in increased global warming), trees are the perfect antidote as they absorb CO_2 and release oxygen

LAND-USE and CO_2 POLLUTION LEVELS

A major cause of global warming is the rate of CO_2 emissions caused by the burning of fossil fuels. Changes in energy use can in time reverse this process. Use of natural gas for example can dramatically reduce CO_2 emissions. The length and frequency of traffic movements are a direct result of land-use patterns and uses as well as other factors such as life-styles, economic development and disposal income. The form of the city, the efficiency and quality of public transport systems, the design of districts and their capacity to provide an extended and relatively self-contained range of functions can play a major role in reducing CO levels. Renewable energy is the medium and long term solution.

A massive programme designed to dramatically improve the insulation of all buildings particularly domestic would be labour intensive (providing for job opportunity in the short term) and would have dramatic effects on CO_2 emission levels and the individual and national wage bills.

1   **Energy Objectives in the Development Plan**

Energy Objectives in the Development Plan should set specific targets e g to reduce CO_2 (and other pollution levels) to 1990 levels by specific dates and thereafter to continue to reduce them. The matter should be addressed under headings such as -

(a)   Use of natural gas
(b)   Renewable energy programmes
(c)   Insulation programmes
(d)   Design of new buildings and their energy efficiency

2.   **Open Space and Landscape**

Planning has tended to regard the main function of open space provision and preservation as providing for active or passive recreational facilities and as 'lungs' of the city. Agenda 21 while recognising the recreational and social values of amenity

lands from a purely user point of view has established the need to maximise the ecological role of open spaces emphasising habitat creation and preservation of ecological networks the promotion of biodiversity the need for wildlife zones and wildlife corridors and the interconnectedness of walkways and open spaces

Agenda 21 therefore has very significant implications for planning and knits' together the traditional Planning and Parks Environmental functions The planning function therefore cannot be divorced from the environmental and a holistic or corporate approach is called for at all levels of the operation of the local authority functioning For example a river valley like the Tolka River must be looked at from source to sea It should be objective of open space planning to maximise the ecological role of open spaces within the city while at the same time maintaining its amenity social and recreational functions and creating ecological networks within and between urban area

Specific objectives should be incorporated in the Development Plan with regard to the existing percentage tree-cover and specific targets for the future e g
' To *increase tree-cover in the city by 100% within a ten year period*   All resources needed to achieve such an objective would be incorporated in the Parks Department s own plan

Parks and open spaces are sometimes seen as a focus for anti-social behaviour   this should be sued as a measure of focusing attention on the need to address the social problems and social exclusion which are part of the Agenda 21 comprehensive approach

Pressures to build an open space in the city should be resisted

Citizens of all classes have a right to live in the context of natural and inspiring landscapes

Local authorities have an obligation to re-introduce quality into the urban landscape where this has been lost or degraded

One of the major objectives of the new Development Plan should be to increase tree cover dramatically in the city (e g double the tree cover over a period of ten years) This derives from the fact that planting trees is the most dramatic way (i e offering the best results) of reducing CO levels While dwellings produce an average of 7 4 tons per annum (new dwellings 5 tons) fast growing trees planted on a rotation system fix 4 tons of carbon per hectare p a temperate hardwoods e g beech fix 2 5 tons p a

To counter the CO_2 emissions from a single new house one would have to plant 1-2 hectares of trees   The city should be viewed in the context of (1) creation and protection of an urban woodland habitat and (b) providing biodiversity and maximising public access

Michael Cregan, states[2] that -

"A landscape strategy for Dublin could start with an appraisal of its opportunities, its need and its problems. Its form would derive from the region's character in terms of its indigenous architecture and of its natural ecology. Key concepts include -

    (a)   *the establishment of a unified system for pedestrian movement, free from the threats of vehicular traffic,*

    (b)   *linkages which would connect the city's spaces to each other and to the city's natural amenities. Included here would be a range of values relating to wildlife,*

    (c)   *the enrichment of public spaces by ensuring accessibility, comfort, user diversity and appropriate building forms,*

    (d)   *the design of open spaces guided by a detailed knowledge of local needs. In this respect Dublin requires a detailed database, and a process for local involvement*

    (e)   *social criteria informing a landscape plan must further derive from a criterion of justice, defined as the manner in which environmental benefits and costs are equitably distributed. Glasgow and Dublin both show a marked discrepancy between the environment of the poor and the rich. Equity in landscape planning must relate the health of the biosphere to all individuals and communities."*

The article goes on to say that -

"Dublin planners need to explore the more comprehensive strategy of urban landscape planning in other European countries. These seek to integrate environmental and social goals to achieve 'ecological' health for the benefit of all the inhabitants"

The article concludes with the following quotation -

"Landscape design interprets our ideas of nature and of culture, developing icons that portray these visions as three-dimensional form. We celebrate landscapes that reflect values we cherish, landscapes that support social structures and form, and are adaptive to change" (Jacobs P (1990) 'Prospect', Landscape Architecture 80, 10 176)

Consequently, the function and scope of parks have to be dramatically extend by

    (a) Re-design of function as necessary

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[2] Michael Cregan, Senior Executive Landscape Architect, City Architects Department Dublin Corporation "*Open Space Planning Strategy an Exemplar for Dublin*" Pleanail, Journal of the Irish Planning Institute No 10 1990/1991

b) Providing for the capability to achieve objectives necessitated by Agenda 21 including where necessary staff expertise in depth and including hands-on local programmes to constructively engage communities at all stages

SUSTAINABLE DEVELOPMENT - DEFINITIONS

The concept of **sustainable development** has been defined as -

(a) **Development that meets the needs of the present without comprising the ability of future generations to meet their own needs** (Brundtland Report 1987)

(b) **Sustainable development means improving the quality of life while living within the _carrying capacity_ of supporting eco-systems** (World Wide Fund for Nature 1991)

(c) **Sustainable development is development that delivers basic environmental, social and economic services to all residents of a community without threatening the viability of the natural built and social systems upon which the delivery of these systems depends** (European Sustainable Cities Commission of the European Communities Brussels 1994)

(d) **A system is said to be sustainable if it allows the well-being of future generations to be at least as high as that of the present generation Well-being in this definition comprises a combination of financial (measured by per capita income, employment etc) social (measured by education level, life expectancy, health, crime rate etc) and environmental (measured by quality of environmental endowments, including air, water, soil, flora and fauna)** (National Sustainable Indicators Forum I C D April 1995)

(e) **Sustainability is a creative local balance - seeking process extending into all areas of local _decision-making_ (Charter of European Cites and Towns towards sustainability** (The Aalborg Charter)

Elements contained in the concept of sustainable development include -

- The protection of the natural and man-made environment recognising the fact that the quality of life at present and in the future depends on the conservation of the environment Environmental issues therefore have to become central to the decision making process and the formulation of economic policies

- The "**carrying capacity**" of the environment is a critical factor in decision-making adding a third factor to socio and "economic considerations It is now recognised that there are definite limits to the ability of the environment to accommodate development

- The "**Stock**" or "**Asset**" of both the natural and built environment must be well maintained and passed on to future generations Besides what is regarded as critical environmental stock internationally regionally, city-wide there is also the local or neighbourhood perspective particularly in areas where the quality of the natural and man-made environments are of poor quality

SUSTAINABILITY - SOME OF THE PRINCIPLES INVOLVED.

- **Precautionary Principle**

  A Presumption against action whose Environmental Impact is uncertain Policy design should have a strong bias towards avoiding creating potential environmental risks

- **The Polluter Pays**

  Environmental damage of all kinds not just pollution should be paid for A new version of polluter pays principle is "Potential polluter pays the prevention of the pollution"

- **Subsidiarity**

  Formulation of Policy, decision-making and administration should be taken at the lowest or most local level commensurate with effectiveness

- **Residuarity Principle**

  If one level of government cannot or will not act others are entitled to do what they can to fill the gap

The principles guiding Agenda 21 are not based on ideology or philosophy but are principles of resource management and good husbandry requiring a long term view The approach insists on the inclusion of all costs in the equation of sustainable development including the full analysis of possible preventative measures as an option to ameliorative or remedial action

FUNDAMENTAL CHANGES IN ATTITUDE REQUIRED

The Judaic-Christian tradition that Western society has inherited is based on concepts such as *power dominance and exploitation* If we couple this with the "Protestant

Ethic which emphasises *individual achievement* rather than the collective or common good it is not surprising that our relationship with the environment has in effect put our very survival at risk The truth is that the resources of the globe are essentially finite and generally non-renewable

Fundamental to the Agenda 21 approach, which judges development on the basis of its sustainability, is

(a) the necessity for a change in our attitudes to and relationship with our environment

(b) the establishment of a rational planning approach based on Agenda 21 principles rather than the "ad hoc" and "muddling through" approaches that has frequently characterised planning decision-making in the past

(c) the need to take the planning process out of the heated party-political arena into a forum with representation of all interests ("multi-stake holder) and within which elected representatives must play an important role,

(d) a recognition of the inter-relatedness of the various aspects of the Agenda 21 necessitating a *holistic* approach to maximise *synergistic* effects

The Local Authority has clearly a pro-active role to play in achieving the objectives of Agenda 21 at the local level In addition to change in attitude which is essential, public awareness must be heightened to achieve the **changes in lifestyle** that are essential

This can be secured by means of

(a) educational programmes,

(b) exhibitions

(c) empowering non-governmental organisations to become actively involved and even leaders in the process e g by funding their programmes,

(d) promoting best practices "in-house",

(e) the creation of a centre of excellence either with the Local Authorities' resources or in partnership with other public agencies and the private sector

THE NEED FOR A NEW ECOLOGICAL CONSCIOUSNESS BASED ON GLOBAL PERSPECTIVES

It is estimated that at present approximately 1,000 tonnes of soil are being washed, blown away or otherwise eroded per second, the earth is losing 3,000 square metres of forests per second an area almost the size of Britain each year each day between ten

and 100 species of animal or plant become extinct around 1 000 tonnes of green house gases into the atmosphere every second

The destruction of the rain forests represents the destruction of the earth's second biggest air renewing lung after ocean plankton The tropical forests are home to the earth's greatest diversity of species and it is here that loss of species primarily occurs Forty per cent (40%) of all medicines derive from the rain forests [4]

Ozone is a gas in the atmosphere which plays a large role in shielding humans, animals and plants from the dangerous forms of ultra violet radiation The destruction of the earth's ozone protective layer is worsening with the ozone practically destroyed in one part of the atmosphere This condition is at its worse when the stratospheric temperatures are very low This self-destruction has been caused by man's action [5]

SPECIES EXTINCTION RATES

Calculation at the exact rates of species extinction is difficult Firstly, there is a lack of knowledge of the total number of species in the world While figures for the number of some species are relatively well known e g the number of bird species at about 10 000[6] estimates of the number of insect species vary greatly from 8 million to 30 million with only about one million having been actually identified[7]

It is likely that a vast number of species that we have never known and many of which could have been of great benefit to man have become extinct

Reliable estimates of the rate at which species are becoming extinct mostly due to human action indicate that the rate has been growing exponentially since about the seventeenth century Current and projected estimates of species loss are based upon the rate at which habitats are being destroyed modified and fragmented - the most serious threats to species diversity - coupled with biographical assumptions relating numbers of species to area of habitat Figures of 100 000 species lost per year are frequently quoted[8]

The destruction of tropical rain forest, coral reefs, wetlands and mangroves is particularly serious given the high biodiversity of these habitats Insects are the order of species most at risk

It is not just in the rain forests where biodiversity and habitat destruction occurs

[3] Lester Brown et al 1989-1992 State of the World 1988 1989 etc New York N W Norton
[4] Ryan John C 1992 Life Support Conserving Biological Diversity Washington Worldwatch Institute
[5] Middleton N The Global Casino An Introduction to Environmental Issues Edward Arnold 1995
[6] Sibley C G and Monroe B L 1990 Distribution and Taxonomy of Birds of the World Yale, Yale University Press
WCMC World Conservation Monitoring Centre 1992 ' Global Biodiversity status of the earth s living resources London Chapman and Hall
[7] ibid

Man is building cities in such a way as to maximise ground cover by buildings and car parks. The rate of loss of green areas running at up to 7% per annum in parts of the greater Dublin area should be a matter of great concern. It would be wrong to think that important species exist only in certain areas of the world although their concentration in rain forest areas is greatest. Ireland was once well forested and its rich oak forests were plundered just as the rain forests are now. The Irish Yew tree which has rich mythological significance in our cultural heritage and was planted generally in the sheltered environment of churchyards and grave yards is now being used successfully in cancer treatment[10] . The over-use of insecticides and fertilisers should be the cause of major concern in the Irish context. The promotion of mono-cultures for example in commercial forestry goes against the principle of promoting biodiversity. The serious reduction of established habitats for example due to the destruction of hedgerows need to be properly addressed.

We must re-examine the value of our environment under many headings including:-

Bio-diversity which should be protected and promoted as an alternative to monocultures.

Habitat protection/nature conservation.

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[9] IUCN/UHEP 1986 "A review of the protected areas system in the Indo-Malayan Realm" and "Review of the protected areas system in the Afro-tropical Realm" Gland, IUCN.

[10] . Research has been carried out regarding the taxol content of Irish Yew by Ms. Jacinta Griffin and Dr. Ingrid Hook of T.C.D. Pharmacy

Open Space - greater diversity in design aesthetics and functions.

Environmental and Wildlife Corridors e.g. rivers and canals.

Open spaces and their linkages.

Amenity landscaping and landscape architecture.

'Greenbelt' protection

Environmental education

Protection of views and prospects

The development of urban forestry

Ecologically friendly maintenance of open spaces and other amenity areas

Increased use of native species, habitat creation e.g. natural woodland, wildflower meadows, hedgerows, water related habitat (e.g. River Valleys). The creation of arboreta are also important.

Avoidance of enrichment of habitat or other degradation through use of fertilisers or chemical herbicides.

Public participation in environmental protection and development.

Protecting and conserving existing mature tree stocks in private property (through measures including planning permission conditions, management plans,

Tree Preservation Orders and Management agreements.

Weed control, hedge and grass trimming at times of the year when they are least likely to effect nesting birds and other wildlife.

The prevention of environmental degradation e.g. from overuse by visitors.

It is difficult for the urban dweller brought up in the Judaic/Christian western tradition to come to terms with the changes in attitude, values, mores and life style implied and necessitated by Agenda 21

Less it stumble into the 21st century and attempt to muddle through, planning must take on board Agenda 21 as its anchor

The underlying philosophy of Planning must be " **sustainable development** " which has to be ecologically based.

The Rio Earth Summit 1992 was the beginning of the development of a new world ecological consciousness which should be based on tenets other than "exploitation" even within the carrying capacity of nature.

It has been argued that man the exploiter must re-discover his relationship with nature which relationship has over time undergone an alienation process

> *"Western culture is most certainly in need of an ecological consciousness and of new kinds of relationships with the natural communities within which they co-exist. Species of plans and animals disappear every day. Land grows less productive, and soon is unable to support any form of life. The lives of living beings, including human beings, loose meaning, purpose and function. Such a state of affairs can no longer be ignored or treated with less than deadly earnestness"* [11]

The development of environmental consciousness and the value systems that underpin it can be aided by the study of other cultural systems

> *"I stood beneath the tall trees and watched a raven fly above me, vanishing and reappearing at it passed behind the tree tops. And I wondered what, or who, it really was. Certainty is for those who have learned and believed only one truth. Where I came from the raven is just a bird - an interesting and beautiful one. Perhaps, even an intelligent one - but it is a bird, and that is all. But where I am now, the raven is many other things first, its form and existence as a bird almost the lest significance of its qualities. It is a person and a power, God in a clown's suit, incarnation of a once - omnipotent spirit. The raven sees, hears, understands, reveals .... determines. What is the raven? Bird-watchers and biologist know. Koyukon elders and their children who listen know, but those like me who have heard and accepted both are left to watch and wonder."* [12]

AGENDA 21 AND PLANNING

When the 1964 Planning Act was brought into force it dealt with Agenda 21 issues within the constraints of knowledge of sustainability prevalent at the time. It is

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[11] Booth A.L. and Jacobs H.M. "Ties that Bind, Native American Beliefs as a Foundation for Environmental Consciousness" Environmental Ethics Vol. 12

[12] Richard K. Nelson "Make Prayers to the Raven" University of Chicago Press P 248, 1983

necessary now to re-draft planning legislation in the context of present day knowledge and terminology The Local Government (Planning and Development) Act 1963 is

> " *an act to make provision in the interests of the common good, for the proper planning and development of cities, towns and other areas, whether urban or rural (including the preservation and improvement of the amenities thereof* "

Agenda 21 in effect forms the contextual framework for determining "proper planning and development which arguably is sustainable development and helps to define "amenities" and other terminology used at the time of the framing of the 1963 Planning Act

Part V of the 1963 Act under the heading amenities deals with a number of environmental matters including areas of special amenity tree preservation orders", conservation orders planting of trees shrubs and other plants ' The very limited use that has been made of some of these provisions and the adoption of Agenda 21 by Ireland makes it necessary to re-address the appropriate environmental issues in the context of a revised planning legislative framework i e a new planning act which would also incorporate the various planning acts and other relevant amending legislation in a single legislative framework

Planning in its operation by local authorities in Ireland has tended to concentrate on the physical aspects of planning because of disparate pressures from within and without the planning authority system Arguably this should now change as the term 'sustainable development clearly states that environmental limitations and the depletion of resources make many of the present and past operational systems in planning untenable

Development must be examined within the constraints of the carrying capacity of the system and the needs of others outside the areas of jurisdiction of the planning authority per se and the needs of future generations It is clear therefore that planning has to be ecologically based and that physical and social aspects have to be examined within environmental and ecological constraints

The Development Plan sets out to implement the terms of the Planning Acts as they are drafted Agenda 21 however in effect defines terminology used in the legislation providing for an enriched understanding of terms such as 'development" and "environment"

The German Minister Topfer chairing the UN Commission on Sustainable Development set up to monitor the application of the Rio Earth Summit stated that *future generations may look back on the Rio Conference and on Agenda 21 as a turning point in the history of urban planning philosophy*

Sustainable development issues have always been central to planning Planners have always carried out their assessments based on socio-economic and environmental effects of physical development proposals These were done within the limits of knowledge available at particular times In fact Regional and Urban Planning has been

described as a process of guiding the development of the physical environment, natural and man-made in response to the needs of society

Planners have, in the face of pressures, at times based on "political" expediency, sought to deal with

(a) the long rather than the short-term perspective,

(b) issues comprehensively and inter-relatedly rather than with limited facets of these,

(c) all affected groups

Both Agenda 21 and Planning emphasise the multi-faceted nature of assessments Both approaches strive to maximise synergistic effects Many of the principles of Agenda 21 are therefore already incorporated in our planning system Rationality, based on examining all aspects and their impacts, has characterised the planning decision-making process which makes it well positioned as a decision-making model for sustainable development

Planning has in the last thirty years tried to apply the principles of sustainability in a rational way with varying degrees of success The main problems which militated against their applicability have been -

● **Planning was ahead of its time in its thinking·**

● **It was difficult to establish a scientific base for rational planning (this has now been established by Agenda 21)**

● **Strong lobbies represented by**
   (i) a push for relatively uncontrolled market driven economic development,
   (ii) the car lobby,
   (iii) the "fossil fuel" lobby, which have tended to form public opinion,

● **The idea that resources were unlimited;**

● **The political dimension whereby planning permissions were perceived to be manipulated and changed.**

The absence of a corporate response with the Local Authority system whereby other departments at times found it possible to distance themselves from the planning function and planners were seen to be the 'bête noire"

The opportunity is now whereby Agenda 21 can underpin the corporate response of the Local Authority

Agenda 21 and Planning both seek to deal with the same comprehensive issues and their inter-relatedness Agenda 21 will greatly facilitate planners in the operation of planning

It is necessary to re-address the issues of common interest between ' Traditional ' Planning and Agenda 21 including -

- Urban Form - The pattern and density of development

- Population

- Land Use

- Zoning

- Transport - car
              - other private
              - public
              - cycling
              - walking

- Effects of decisions by one Planning Authority on the area of others

- Dereliction and obsolescence

- Heritage archaeology architecture townscape

- Refurbishment strategy for buildings

- Participation vs Exclusion

- Consumption of greenfield and amenity lands - effects of decision-making and policy on these

- Air quality - pollution

- Use of Renewable vs. non-renewable resources

- Energy

- Safety

- Health

- Education

- Employment

- Natural Environment and Landscape quality

Planning must address its mainline functions with regard to their inter-relatedness to other functions and responsibilities. There has to be a change in emphasis from the purely physical to one which is more inclusive of the environment, with more sophisticated consultative processes and a move away from compartmentalisation of the planning function. The Planning Acts provide for this inclusiveness once Agenda 21 is taken on board.

Indicators for Land Use

It is necessary to identify specific indicators for land use[13], for example -

(a) Percentage and distribution (e.g. related to existing densities) of population living within 400 metres of public transport

(b) Percentage of employees working within 400 metres of a public transport node

(c) Average travel to work distance

(d) Percentage of population within 1500 metres of a district centre and major foodstore

(e) Percentage of population within 400 metres of a primary school

Spatial Implications of "the sustainable city" include:-

Some of the Spatial Implications of "the sustainable city" include -

Reduction in the use of private cars by various means including the re-design of areas so that there are shorter distances between the most common destinations, such as home and work and home and daily services

Office workplaces and other urban functions requiring substantial personnel transport should be located near public transport e.g. railway stations

Increased densities in selected areas

Development of the urban forest, i.e. city viewed in the context of a forest of which is a part, including a major intensification of the planting in the city

Preservation of green belt e.g. stricter measures and legislation to prevent re-zoning

Structured green space network related to segregated pedestrian (traffic free) ways and cycleways and public transport system

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[13] "Sustainable Settlements A guide for Planners Designers and Developers"
The Local Government Management Board 1995

Developing mixed-use urban districts with housing, workplaces and the necessary services as one way to reduce the growth of the total volume of transport, a mix of functions also contributes to providing a community environment with enriching experiences This should apply both to new districts and to the restructuring of older ones

Preservation and conservation of historic heritage, listed buildings and enhancement of local identity

Conservation enhancement and creation of species - rich habitats and communities providing for maximum bio-diversity

Creation of Wildlife Corridors separately and in association with Rivers Canals, Railways and Cycleways

Major public awareness educational and involvement programmes dealing with all aspects of Agenda 21

In 1990 the European Commission published a Green Paper on the Urban Environment with implications for member states in the areas of land use industrial and economic growth, energy and waste urban traffic policy public transport, heritage conservation and green space policies and strategies Of particular relevance to Urban Development Plan Review is the Green Paper's advocacy of mixed use zoning increased densities, the re-use of disused land revitalisation of existing residential areas and treatment of contaminated land

The concept of Local Planning and District Centre Design and Function - This concept will be developed later in the paper under the *Diversified Extended District* D E D or the model, which includes elements such as

(a)   The degree of decentralisation of Local Authority and other service function to a district basis

(b)   How to achieve increased diversity of function in districts

(c)   Tele-working - what is necessary e g build offices which would facilitate the process - this could be done as a joint venture by public agencies and the private sector

(d)   Reducing incidence length and frequency of car journeys
         Car parking programmes
         Job inter-change programmes designed to reduce journey to work distances
         Improvements necessary to facilitate recycling and make cycling and walking safer, easier and more attractive -
         Extension of pedestrian only areas
         Separate cycleways
         Priorities re-arranged to favour cyclists

The need to reduce the incidence length and frequency of car journeys is due in part to the car being a major producer of CO and other pollutants and contributor to global warming. Experts of the United Nations Intergovernmental Panel on climate change have concluded that the world's total carbon dioxide emissions must be halved in the next 40-50 years to combat the greenhouse effect.

AGENDA 21 AND THE DEVELOPMENT PLAN FOR THE 21st CENTURY

The contribution of the Development Plan to sustainable development will be in many areas including -

(a)   the identification of carrying capacities
(b)   environmental auditing
(c)   identifying catchment areas
(d)   working on the precautionary principle
(e)   ensuring that irreparable damage to natural and man-made stock is avoided

It has been argued that the role of the planning authority should be enlarged to cover aspects of Agenda 21 such as social exclusion and job creation (e g not just reserving land for various uses) This represents a more pro-active approach Exclusion is one of the areas which planning tackled in the ' sixties although new programmes and approaches are called for to meet today s needs

Planning has a key role to play in tackling social exclusion Development Plans and Development Control will of necessity and increasingly use sustainable development criteria such as carrying capacity and environmental auditing as a basis for planning policy-making and development control decisions Furthermore in addition to policies the Development Plan must provide for area-based objectives which can be easily translated into detailed action plan studies which in turn can provide a framework for development control decisions

The United Nations Conference on Human Settlements(Habitat II) 1996 states that -

> *"The quality of life of all people depends among other economic, social, environmental and cultural factors on the physical conditions and spatial characteristics of our villages towns and cities. City lay-out and aesthetics, land use patterns, population and building densities, transportation and ease of access for all to basic goods, services and public amenities, have a crucial bearing on the liveability of settlements. Objectives of this endeavour include promoting equality and respect for diversity and cultural identities and preservation of historic, spiritual, religious and culturally significant buildings and districts respecting local landscapes and treating the local environment with respect and care. It is also of crucial importance that spatial diversification and mixed use of housing and services be promoted at the local level in order to meet the diversity of needs and expectations.*
>
> *Increasingly cities have a network of linkages that extends far beyond their boundaries. Sustainable urban development should consider the carrying*

capacity of the entire eco-system supporting such development, including the mitigation of adverse environmental impacts occurring <u>outside</u> urban areas. The unsafe disposal of waste leads to the degradation of the natural environment, aquifers, coastal zones, ocean resources, wetlands, natural habitats, forests and other fragile ecosystems are affected as are the homelands of indigenous people. Promote the conservation and sustainable use of urban and peri-urban biodiversity including forests, local habitats and species bio-diversity, the protection of bio-diversity should be included within local sustainable development planning activities"

ICLEI's Local Agenda 21 Communities Network.

The ICLEI (International Council for Local Environmental Initiatives) has a series of criteria upon which participation by municipalities in ICLEI's Local Agenda 21 Communities Network depends -

- Is the local campaign or planning effort based upon a multi-stakeholder approach which includes representatives from the governmental private enterprise, non-profit (NGO) and informal sectors?

- Does the local planning effort facilitate inter-sectoral and inter-disciplinary analysis and discussion of problems and potential solutions?

- Does the campaign or planning process provide a variety of opportunities for input and participation from residents of the community and from representatives of various sectors and interest groups?

- Is the planning process going to consider the full range of local, regional and global issues addressed in Agenda 21?

- Is the planning process going to establish concrete baseline data about local environmental economic and social conditions

- Is the planning process going to establish an action plan with practical and concrete targets for both near short and long term activities and accomplishments

- Does the planning process include the establishment of a mechanism or mechanisms by which the local authority and other sectors regularly report on progress in achieving targets?

The Dublin Regional Authority comprised of the four Dublin local authorities proposes to develop a Framework Plan for the development of the region which it hopes will assist local planning authorities

The implementation of Agenda 21 necessitates a local and regional approach A key question which has to be asked is to what extent did the re-organisation of local government in the Dublin area militate against the implementation of a joint approach vis a vis the principles of Agenda 21?

A co-ordinated approach is essential as decisions of one authority can seriously affect or help the other e g higher densities in the city can conserve habitat in unspoiled areas of Fingal, Dublin South County and Dun Laoghaire-Rathdown   The development of out of town shopping centres could seriously affect district shopping centres in the city e g Blanchardstown on Finglas, Quarryvale on Ballyfermot and Omni on Ballymun, the "submarine" site on Crumlin village

SOME ISSUES FOR AN AGENDA 21 DEVELOPMENT PLAN

Density

A policy for higher density and more compact urban forms is necessary generally and particularly in relation to existing and proposed public transport networks bearing in mind the needs of other criteria such as the conservation of man-made and natural environmental heritage townscape open spaces walkways cycleways wildlife corridors and the preservation enhancement or creation of species rich habitats   This implies in part a more vertical city with good design providing for a high degree of privacy good quality landscaping and space standards (internally and externally)   The different needs of public and private sector residential design would have to be assessed separately   Higher density of development will help to achieve several of the objectives of Agenda 21 including

    (a)   reducing the amounts of land required for new development

    (b)   reducing energy needs

    (c)   the judicious location of the higher range of densities facilitating an increasing role for public transport

While advocating higher densities as a general principle it is important that were appropriate possibilities for home-based economic activities are planned for or facilitated which provide greater scope for economic self-sufficiency

Higher densities including high-rise should be located

- along major transport corridors
- near rail/bus stations
- adjacent to large parks and open spaces

On a precautionary note, objectives to preserve, enhance and extend existing parks and opens spaces should not be frustrated by encouraging policies outlined above

High rise development can free open space around dwellings for tree planting (the urban forest)

The lack of utilisation of upper floors throughout the city has to be reversed   The effect would be to conserve greenfield sites elsewhere

Policy in relation to densities in the city therefore should provide for -

1. Increased densities generally and particularly in specific areas e g in proximity to public transport systems

2. A more vertical city

3. Providing for -
   (a) in the area of the local authority
      (i) Arresting of the loss of green space in the first instance
      (ii) the increase in percentage of green spaces and

   (b) Assisting adjoining local authorities in the region in preserving important habitats e g Wicklow and Dublin Mountains i e Regional perspective needed

4. Marrying he above i e 1, 2 and 3 with the needs of conserving the history, heritage, archaeology, architecture, townscape and biodiversity of the city

5. The utilisation of upper floors vacant buildings and derelict sites can make a major contribution to preserving green grass

6. Significantly higher densities should be permitted in certain areas so designated - consistent with criteria which provides for -
   (a) excellence in design
   (b) the preservation of existing quality of life
   (c) the preservation enhancement and creation of landscape, habitat and biodiversity
   (d) conservation of the built environment

Mixed Use Planning.

In referring to mixed use zoning what is meant is maximising the diversity of uses which are desirable and permissible in different areas of the city   In arriving at standards one must consider various aspects including -

- Compatibility of uses
- Land use as determinant of scales of traffic generation
- Scale of use(s)
- Noise/pollution/nuisance generated
- Time of day during which operation/use functions
- Fine-tuning of use classification
- Centralities
- Relative autonomy desirable and attainable for districts of the city

- The resources of the enforcement function of the Planning Authority
- The degree of control which existing legislation provides for *vis a vis* use classification definitions/and areas of classification where change is needed
- Changes possible due to the advance of new technology
- Effects of new uses on property values
- Standards of presentation of uses

One immediate change is in the area of tele-working with many people working either from the home or from existing or purpose-built office units in district or neighbourhood centres

Objectives should be included in the City Development Plan with appropriate alterations to zoning objectives to facilitate compatible home-based economic activities

The simplistic zoning for mono-culture i e relative lack of diversities of previous development plan lands-use which in effect helps to maximise traffic generation with so many ill-effects should be replaced in time by more fine-tuned use classifications The zoning of vast areas industrial or residential thereby in effect excluding the maximum number of other uses has been counter productive and unsustainable

Another category where considerable progress can be made is in the area of home-based economic activities While working from the home is desirable as a general principle a key factor in determining policy has to be the estimation of possible disturbance of other residents The planning of new developments should take into account both tele-working and the promotion of home-based economic activities once appropriate policy changes have been effected Existing developments have not been designed with a view to promoting diversity of use A small number of extreme cases in the experience of the Planning Authority may have had a disproportionate influence in shaping policy One of these have been nuisance uses such as scrap yards where a small number of operations have stretched the resources of the enforcement function to the limit and caused major problems to local residents

Because the City of Dublin is largely built up and developed more and more on a mono-culture basis at the expense of diversity it is more difficult to effect the required changes than working from a greenfield situation The degree of difficulty however does not obviate the need to bring about the desirable and necessary changes working with short-term (0-5 years), medium terms (5-15 years) and long term (15-30+ years)

Transport.

Transport uses about 30% of the world's commercial energy production and consumes c 66% of the world's petroleum production Exhaust gases pollute the air with ground-level ozone, particulate matter carbon monoxide and other gases which harm health

Road transport produces 25% of the greenhouse gas emissions (based on U K figures) almost as much as energy use in the home and greater than heating oil offices Encouraging people to cycle and walk as one of the best ways to reduce "greenhouse" emissions

Traffic is one of the main threats to a healthy environment In addition to Nox which is a respiratory irritant and contributor to photo-chemical smog, road vehicles produce 90% of carbon monoxide and 59% of "particulates" - very fine dust linked to cancer

The *Granada Declaration 1993* recognised five strategic pillars for achieving accessibility

    1 Greater reliance on co-ordinated land use policy towards the reduction of unnecessary physical movements

    2 Reduction in the need for motorised journeys

    3 Broadening the range of alternatives

    4 Telecommunication systems as a substitution for physical movements

    5 Building up an effective integrated multi-modal and multi-level access system

47% of all journeys are two miles or less ideal for walking or cycling 74% of all journeys are five miles or less

The Isis Project.[14]

The ISIS Project is a Transnational European Demonstration Project to develop and clarify the concept of sustainability and apply it to real transport and local land use planning situations and choices The project will demonstrate the use of an integrated auditing system for the evaluation of transport plans in a contrasting set of European locations

The model will be used to predict a comprehensive range of key environmental effects of alternative transport and land use planning scenarios for the year 2012 and to assist the development of options which will best meet sustainability requirements This will result in decision support for local sustainability planning choices An ISIS audit framework will be developed as a foundation for building the sustainability audit model Sub-topic work programmes are being

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[14] **ISIS** Kirklees Environmental Unit 23 Estate Buildings Railway Street, Huddersfield HD1 1JY United Kingdom

developed based on the experiences of the four partners (Kirklees West Yorkshire (the lead partner) Berlin, Copenhagen and Madura)

These are -

* Air Pollution	* Health Impacts
* Noise Pollution	* Social Impacts
* Traffic Model	* Land Use Planning
* GIS/Land Use/Habitats	* Institutional Processes
* Energy Use	* Transport Policy

One of the areas in which planning can be most effective in relation to the objectives of Agenda 21 is in the area of CO_2 emissions Carbon Dioxide (CO_2) accounts for 55% of additional greenhouse effect which results in global warming

Transport's share of energy use is estimated at 30%+ (based on U K figures) Transport's contribution to CO emissions is 25% approximately and increasing (based on U K figures)   Transport also pays a significant part in contributing to greenhouse gases (low level ozone nitrogen dioxide etc) and acid rain Due to rising incomes increased mobility the effects of land use planning, poor investment in public transport and lack of promotion of and facilities for walking/cycling car ownership and usage is rising significantly resulting in increased energy consumption and CO emissions from this source

It has been argued that it is probably in the field of transportation that sustainability and planning are most closely linked and where planning can exert the greatest effects

Increased segregation of land uses has contributed to the number and length of trips

Specific objectives have to be outlined which will achieve the changes necessary to promote sustainable lifestyles and to inform and form public opinion

There is a trend towards reduction of pollution emissions from industrial plants and increase of emissions from cars

It is necessary to adopt a transport policy which achieves the following objectives

- Greatly reduces energy consumption levels
- Greatly reduces pollution levels
- Significantly reduces noises levels
- Increases road safety for all road users, thereby encouraging cycling and walking
- Diverts unwanted vehicular traffic including heavy goods vehicles from residential areas and town /village / district / neighbourhood centres

- Encourages multi-purpose trips
- Develops a mobility management policy which minimises the number and length of journeys by specifically concentrating activities
- Substitutes where practicable, physical movement by other forms of interaction - increased use of telecommunications
- Maximises the jobs/service autonomy of each area
- Clusters the provision of facilities where possible in local and district centres
- Plans compact rather than dispersed settlement patterns
- Plans generally higher average densities
- Improves the availability efficiency and user attractiveness of public transport as an alternative to the private car
- Avoids the expansion of town/village as dormitory settlements (i e need for regional strategy)
- Reduces car use by means of various constraints including charges parking limits at major trip generating locations, licensing all car parking spaces in the city
- Promotes car pooling
- Traffic calming involving reduction in speeds to safe levels in residential areas neighbourhood centres and district centres, maintaining steady but calmed" flow
- Provision of car parking close to public transport nodes in order to facilitate park and ride but promote bus/tram/train interchange and walk/cycle and ride as a better option to "park and ride
- Promotion of a shift in car taxation from car ownership to car use and efficiency
- Promoting a culture of the bicycle through many and varied initiatives
- The appraisal of rail and road schemes on an equal basis including all costs and benefits including energy consumption time-saving environmental maintenance, accidents etc
- Maximise penetration of public transport services to all areas
- Vastly improved safeways for walking and cycling Promoting walking and cycling as the first preference for trips made Both forms are desirable as the best option for many reasons They are pollution free help to promote a healthy lifestyle and use little space in comparison with other forms The safety, convenience and aesthetic quality of pedestrian and cycle routes should be improved
- Cycleways should be designed with a view to providing the maximum safety Major design of intersections at major costs should be involved
- Priority should be given to pedestrians and cyclists in residential areas neighbourhood centres, district and city centres and other locations This priority should derive from factors including the speed of traffic yield and stop signage the design of roads

particularly intersections separate and shared cycleways and cycle paths

- A complete network of cycleways should be provided in the city, planned with specific targets and timescales A 60 mile cycleway network is at present approaching the implementation stage in Dublin city A further 100 miles should now be planned for
- Generally avoid increasing road capacity
- Reduce road capacity in sensitive areas
- Promotion of and implementing of the European Charter of Pedestrian Rights
- Restricted provision of parking at all major traffic generators in centres suburbs and out of town
- New car-based out of town retailing and business parks should be discouraged

Limitations by capacity and price on town centre parking, both public and private, should be established provided that it does not result in development taking place in more energy inefficient locations This is based on the fact that levels of parking provision can be more effective than high levels of public transport provision in affecting the modal split as between public and private transport Car parking utilises space, thereby reducing densities Reducing private off-street car parking facilities is seen as an effective planning instrument in favour of sustainable development This calls for the need for a licensing system for all private car parking in the city

The location of multi-storey car parks in the city centre vs the banning of traffic from the centre city core area is not a good choice vis a vis the aspirations of Local Agenda 21 The problem now is to prevent the location of further multi-storey car parks within the core area together with a coherent and far reaching promotion of walking and cycling A free bus service in Dublin City Centre and in each *Diversified Extended District* Centre should be implemented

Measures to enhance walking and cycling [15]

Measures to encourage cycling and walking include the following elements

- re-design of junctions
- provision of special infrastructure including bicycle lanes and routes, sidewalks pedestrian bridges, etc
- promotion of the culture of the bicycle
- provision of special signalisation and markings (e g pre-start for bikes at traffic lights, opening one-way streets for bikes in the contra-flow direction, permitting bicycles in pedestrian zones)

[15] 'Green Urban Transport a survey European Federation for Transport and Environment Brussels 1994

- provision of secure parking spaces for bicycles especially at public transport stations (bike and ride)

- provision of special facilities for carrying bicycles on public transport

- free bicycle system based on Copenhagen system

- encouraging cycling and walking through information schemes, employer support, insurance incentives etc

Other means of promoting the use of the bicycle include

- cycle loans pool-bikes, cycle mileage payments
- secure sheltered cycle parking, showers, changing rooms for staff
- maps of cycle routes
- advertising
- safe routes to school
- design of non-motorway roads to include cycleways
- conditions to be included in planning permission for cycle parking for both
- employees and visitors

The proposal to spend £12m on promotion of the bicycle in Dublin represents a dramatic step compared with past policies

In the Netherlands, the bicycle masterplan drawn up by the central government has the aim of achieving a significant switch over from car to bicycle The goal is to stimulate bicycle usage and, and the same time increase the road safety and attractiveness for cyclists Targets include

- increasing the number of traveller kilometres by bicycle in 2010 to 130% the 1986 level

- equalisation of urban commuting times by car and bicycle for distances up to 5 km

- increase train travel by 15% between 1990 and 2010 through better-public transport linkages

- reducing the number of fatal casualties and injuries each of 50% in 2010 compared to 1986

The programme involves a publicity campaign to present a positive image of cycling, measures to reduce bicycle theft and measures to enhance the feeling of safety[16]

Dublin with 6% bicycle users is well behind other European cities who have achieved usages of up to 30% (Netherlands)

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[16] Energy efficiency opportunities for transport in Ireland report to Irish Energy Centre, June 1996, Page 59

Cycling can make a positive contribution under all of the following headings [17]

- fossil fuel depletion/global warming
- biodiversity
- acid rain
- quarrying of aggregate
- air pollution as a health risk
- noise
- local environmental quality landscape, townscape art
- people's access to and enjoyment of pleasant surroundings
- equitable access
- avoidance of transport poverty
- employment
- tourism promotion
- health

Public transport.

Public transport should be promoted by

(a) Priority Corridors, e g Bus Lanes
(b) Ticket pricing and flexibility in use
(c) Frequency Scheduling
(d) Advertising/User Information/"Aggressive" Marketing
(e) Route planning and subsidy for journeys not catered for
(f) Location of public car parking *vis a vis* specific sustainability objectives
(g) Bus Shuttle from rail stations and bus stations
(h) Same ticket for in-city, same direction/same day, multi-mode (i e can go from train to bus and vice versa)
(i) Maximising penetration of public transport services to all areas
(j) Providing a free bus service in city and district centres from which car parking facilities are excluded

Habitats, Biodiversity, Open Spaces, Parks, Urban Forestry.

Habitats, biodiversity, open spaces, parks, and urban forestry should be promoted by

- Re-plan the city in the context of the Urban Forest
- Double tree cover (native broad leaf woodland) within a specific period (10-15 years) Trees are a real antidote to many pollutants

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[17] Sustrans "Local Agenda 21 and the National Cycle Network"

- Open space

- Create linkages to open space networks

- Reduce % age of loss of greenfield lands to development

- Specific objectives to increase habitat and biodiversity

- To achieve a target of 25% to 30% as a proportion of the total city land area for green spaces and other public areas

- Specific measures to enhance waterways

- To devise and implement more extensive and comprehensive environmental education programmes for communities and schools

- Preserve green belt lands/improved legislation to prevent ' maverick re-zonings contrary to the Development Plan

- Lands along river valleys and other waterways The Planning Authority should devise a policy to preserve and enhance river valleys by pro-actively acquiring lands along these waterways for public use while the parklands and other amenity areas are the lungs of the city the waterways are the arteries (using the analogy of the human body) This should be done in the context of an overall Environmental Plan for the city

The Agenda 21 Plan could include specific Objectives such as -

1   Double the tree cover within a period of ten years

2   Increase the areas of public open space by specific amount e g 1% per annum with a final target of 25% of total land as open space (Garden City Standards)

3   Specific measures to preserve and increase biodiversity and habitat creation

4   Specific programmes of community involvement in the process

Institutional Lands

Objective to seek to acquire institutional lands which are surplus to the needs of institutions for amenity purposes in order to increase the % age of public opens space to provide recreation facilities and create species - risk habitats and biodiversity

District and Neighbourhood Design and Re-design

New areas should be designed and existing areas should be re-designed as necessary on a multi-disciplinary bases using a truly three dimensional approach on the basis of criteria such as the following [18] -

- Responsiveness
- Robustness
- Legibility
- Permeability
- Personalisation
- Richness
- Visual appropriateness
- Variety/Diversity
- Adaptability

These criteria should be coupled with other design elements including recognising the important role of the following elements nodes, paths, districts, landmarks [19]

Tele-working

The journey to work is the main cause of traffic congestion yet technology is so advanced as to make the daily journey to work unnecessary for a high proportion of employees who could work equally effectively staying within their own district/neighbourhood if that area was equipped with the necessary office and other "back-up" facilities In this way the daily journey to work would be replaced by a communications based employer/employee relationship with the necessary technology being provided locally

Building Design and Layout.

The design of buildings and their layout have major implications for sustainability Important factors include -

- the projected life span of buildings i e their durability
- energy consumption
- materials used
- heating efficiency
- design flexibility - if for example in time the journey to work for office employees became unnecessary due to advances in the use of new technology, it would be important that flexibility of design of office blocks would provide for their conversion into other uses e g residential apartments

[18] Bentley Alcock Murrain McGlynn and Smith Responsive Environments" The Architectural Press 1985

[19] Kevin Lynch The Image of the City

- new housing developments should be designed for home-working
- building materials should be drawn as far as practicable from the nearest sources
- the built environment should be designed to provide the maximum diversity while at the same time providing for privacy and minimal interference with residential amenity

Energy

Planning can make a major contribution to energy management and conservation by -

- reducing the energy consumption generated by the built environment, e g lighting, heating
- selecting building materials taking into account the energy used in their production
- reducing energy consumed in trip generation, their multiplicity and range
- promoting the recycling of building materials
- active promotion of combined heat and power schemes (CHP)
- upgrading the thermal performance of buildings/improved insulation schemes for existing buildings
- maximising passive solar heating by the orientation of buildings (housing layouts) and the design of buildings (e g conservatories on domestic dwellings)
- promoting the development of the technology and use of re-usable energy resources/increased use of solar panels
- promoting the development of renewable energy

Specific objectives should be included in the Development Plan in relation to energy e g a 25% reduction in energy consumption (in specified areas) in the city as the city's contribution to reducing global carbon dioxide emissions

A complete energy database should be built up e g comprehensive insulation survey of domestic and other sectors

Derelict land and use of building/housing stock.

Reduce amounts of derelict lands and vacant buildings and housing stock by specific percentages

Employment creating projects

To create increased employment opportunity by -
- adopting a recycling policy *vis a vis* waste management

- devising energy saving schemes e g home insulation
  greatly accelerating the rates of tree planting programmes
  maximising the Parks Department's, the community's and non
  governmental organisations' involvement

Waste disposal.

Devise specific programmes under the headings

- Reduce
- Re-use
- Re-cycle - extend "kerbside" scheme to cover entire city
- Reduce the amount of waste disposal by landfill by 50% within s
  pecific time scales

Pollution reduction.

Specific objectives and measures and timescales to stabilise and reduce levels for pollutants including CO_2, NOx and HC

Noise.

Specific measures and programmes to reduce noise levels

SUMMARY

The 21st Century sustainable development plan will be holistic not restricted or minimalist in its scope it will be

- **Specific not aspirational with·-**
  Strictly quantified measurable objectives/targets
  Rich on base-line data
  Short, medium and long term objectives

- **It will be participatory/providing for fora which are district based city wide and regional. (i.e. multi-stakeholder approach)**

- **It will promote sustainable development**

- It will promote diversity and bio-diversity

- It will apply global national and regional issues to the local situation

The Agenda 21 driven plan would be a corporate presentation where the Agenda 21 related targets and time-scales of the different departments of the planning authority would be synchronised

Some of the objectives may require support including financial from sources external to the local authority and in some cases authorisation of a change in function by amended legislation or statutory instruments

THE *DIVERSIFIED EXTENDED DISTRICT* (DED) MODEL

The DED approach is based on a number of concepts -

(a) The promotion of diversity of uses at district and neighbourhood levels

(b) The extension where necessary of an existing district to achieve the degree of diversity and the range of functions needed

(c) Optimising the relative autonomy of districts

(d) The adoption of an area-based local planning model

For district and local planning purposes the city should be divided into a number of identifiable areas using criteria such as physical distance or radii, local identities, existing centralities population size etc in order to develop a manageable sustainable community-based planning approach Some areas of the city are relatively easily identifiable for this purpose e g Finglas and Ballyfermot In other cases a number of different nuclei could be included Population size might vary within a range of 20,000 - 40,000 (There could be exceptions to this)

The emphasis would be to develop a diversified multi-faceted district relatively self sufficient and designed as far as practicable to limit trips outside the district The definition of areas should be looked at in the context of the development of local partnerships which are official bodies set up by the Social Partners" as part of the PESP (Programme for Economic and Social Progress Agreement 1990) The centrality of sectors could be determined by criteria such as critical travelling time and distances e g 47% of all trips generated are two miles or less and are very suited to walking and cycling (75% of all trips are 5 miles or less, very suited for cycling Distance from the periphery to the centre of the district would be in the region of one mile

The *Diversified Extended District* Approach will involve a re-definition of the extent and role of existing district and neighbourhood centres and their relationships to their hinterlands their complementarity to each other and the varied functions of the city's component sectors

The *Diversified Extended District* can be used as an area-base for setting up "Environmental Fora" recommended by the European Union

The *Diversified Extended District* Approach would be more successful if coupled with other policies such as promoting locally-based employment i e encouraging recruitment within each district

The *Diversified Extended District* approach aims at concentrating various activities including work/home /leisure activities in such a way as to minimise the number and length of journeys making more multi-purpose trips possible and activity planning related to public transport bodies

It is not suggested that each district would be planned to the exact same model or blue print While drawing board ideal-type models would be developed as guides, economics of scale would be a consideration with might warrant a degree of specialisation between districts A synergistic approach must be taken whereby districts are planned and assessed in relationship

Local authority offices should be set up in each district This would represent a change from the attitude of located all services in one location which unless coupled with district offices is contrary to the principles of sustainability

Within the *Diversified Extended District* approach disparities would have to be tackled seriously There are many marginalised and relatively deprived communities both in the Inner City and the of Dublin City suburbs In some cases there is little evidence of the heritage of the areas in the present built environment The built and natural environments have been seriously and in places irreparably damaged by 'blanket building and insensitive new developments Natural and man-made amenities including the built environment and natural habitats may have been seriously compromised so that there is an obligation to re-establish a quality environment as part of the process of tackling degradation and establishing quality landscapes An important role in this regard can be played by landscape architecture working with planners

Telecommunications networks providing for the possibility of local teleworking should be planned for as part of the *Diversified Extended District* Model

One of the objectives which should be tackled within the *Diversified Extended District* Approach is the securing of a social mix in housing As a class-based segregated city Dublin has a long way to go to achieve the objectives of Agenda 21 The present practice of building additional local authority houses in existing marginalised communities should be discontinued

Advantages of the *Diversified Extended District* (DED Model)

The *Diversified Extended District* Model has the following advatages -

1   It provides for an area based community planning approach

2   Existing district and neighbourhood centres can be re-defined in the context of the objectives of the DED concept

3   It provides for a mixed-use strategy a principle advocated in Agenda 21

4   It can accommodate short medium and long term re-design of existing neighbourhood and district centres e g by means of medium and long term zoning objectives

5   The design and re-design of neighbourhood and district centres can take account critical travelling distances and times which together with diversity of function and improved efficiency and choice of travel mode can make a major contribution to reducing the distance and frequency of vehicular type, reducing significantly pollution accident rates and traffic congestion

6   It can provide an area basis for the development of the type of fora envisaged by Agenda 21

7   It can provide for an increased civic sense and can strengthen positive identity on an area basis where local arts history and heritage can form the basis for constructive involvement in developing local initiatives and entrepreneurial skills

8   Combined with adequate traffic calming measures the provision of safe walkways and cycleways and pedestrianised core areas the DED concept can provide for an enhanced quality of life with reduced stress in terms of shopping, journey to work leisure, and visual urban quality

9   It can be limited to appropriate population levels (e g 20,000 - 40 000 approx) which would justify the provision for certain suitable locally based public services re-inforcing the function of the DED in relation to the hinterland

10   It can with adequate central service provision and partnership between the public and private sectors, make a major contribution to solving journey to and from work traffic congestion e g the building of office facilities in the DED and to provide for tele-working

11   It can provide for the complementarity of specialist functions between districts and neighbourhoods provided that the

appropriate and efficient communications and linkage are
provided

12   It canprovide a basis for the devolution of functions in both the
           private and public sectors

PARTICIPATION vs EXCLUSION

Poverty and exclusion is reflected in the zoning policy of the city where social mix and
the benefits which can accrue are frustrated   Crime and anti-social behaviour of
various kinds including drug-addiction and alcohol abuse drain the resources of the
community   Preventative programmes are the most cost-effective ways of
ameliorating these problems yet the approaches most often used tend to be those of
containment, exclusion and incarceration   Massive involvement in preventative
measures of all kinds would represent a cost-effective approach to social problem-
solving   Take for example the amount of finance invested in prisons compared to the
financing of the youth facilities career and vocational training

The social-inclusion approach incorporates the concept that every person should have
a 'stake' in society   Because of serious unemployment other definitions of social
worth and credit for endeavour will have to be developed possibly in the context of a
 community-based   urban-district   model   based   on   such   ideas   as   self-help
empowerment and self-sufficiency

Cities tend to hide social problems which have major debilitating effects by
ghettoisation and social micro-jungles and present the city through interpretative
images which include the cultural past achievements linked to artistic exhibition
(increasingly sponsored by big business) conservation areas and state of the art
shopping and allied developments

The development of inclusive partnerships could make a major contribution to local
Agenda 21   Formal Partnerships have been set up following the Programme for
Economic and Social Progress (PESP) Agreement of 1990 with Trade Unions and
Government At present these partnerships are at a very early stage in their
development   Although set up initially to tackle long-term unemployment they have
concentrated on capacity building and community development

In tackling the area of social injustice environmental improvement can also be
achieved   These factors are interrelated in that even in the most prosperous cities there
are sectors where environmental degradation and social exclusion go hand in hand
areas of functional impoverishment ghettoised housing   lack of opportunity,
joblessness, social welfare dependency lack of social infrastructure facilities and
organisation, delinquency crime poor access to information education and training,
lack of creativity innovativeness and entrepreneurship due to social exclusion giving
rise to dependency cultures

In such areas it is necessary to start from first principles by creating a sense of place of
identity and belonging   It is necessary also to create an awareness which empowers

citizens to be constructively involved in all facets of life in their area up to and including partnership and the feeling of joint ownership in appropriate areas of common interest

We need to return to the concept of urban renewal with the advantage of things learned in hindsight and the knowledge and principles supplied by Agenda 21 providing for -

- The role of planning as key facilitator/initiator in the process of urban renewal as part of a planning programme which is not crisis led i e not re-active but pro-active
- A project-orientated approach
- Participatory processes
- Using urban village/district model
- Adequate funding
- Role of rejuvenation/conservation versus demolition

The Role of Arts in the Community

Perhaps one of the most neglected areas in terms of resource funding and manpower, yet one which offers excellent opportunity for constructive involvement by marginalised communities is the development of the arts Each facet of the arts should be looked at with a view to maximising community and individual participation Creativity through art forms can promote health fulfilment and a sense of civic pride in the individual and the community   Town planning, architecture including landscape architecture and public art are complementary models of expression in urban design It is a function of art and environmental education to heighten awareness of the importance of landscape and the natural and built environment Citizens have a right to live in a community whose physical and natural environment stimulates creativity Excellence in urban design should not be the prerogative of the few but the right of all citizens   Excellence in landscaping should be for all to appreciate and experience within their own community Communities should be involved in creating an environment of excellence and become in time the guardians of it

FAS through the Artsquad Scheme and through other important projects such as the Down to Earth Theatre Co (an Environmental Arts Initiative),has perhaps played the key role in developing community arts servicing marginalised communities in the Dublin area The Artsquad Initiative which was initiated by the Sculpture Society of Ireland and the Artists Association of Ireland is strongly supported and assisted by local authorities in the Dublin area

Best practice in participation is based on permanent fora where each party has equality of status and parity of esteem The process contains the following elements -

- **Information -** full access at all stages
- **Communication -** a two way process of exchange of information
- **Dialogue** i e communication over extended period i e not once-off or short-period time-scale
- **Consultation -** i e each party s position is treated as having weight and of equal importance in deliberations
- **Networking -** parties work closely together
- **Partnership -** Operation of formal joint programmes

OBSTACLES TO PARTNERSHIP.

Obstacles to proper partnership include -

- Lack of trust
- Imposed visions
- Unrealistic objectives
- Conflicting aims
- Subsumption - (i e one "partner" dominating by appropriating another)
- Centralisation of financial controls
- Public perception of systems and decision-making processes as inequitable
- Legislative Framework Restrictions

INTERVENTION vs MARKET-DRIVEN APPROACH.

1   Early integration is required in what would otherwise be an entirely market-drive approach to City renewal

   (a) To safeguard the interests of existing communities, their heritage, customs, traditions, family and kinship systems, local identities

   (b) Re-location of inner city communities to suburbs should be carefully re-assessed

2.   Policies to date have resulted in a city segregated on a class basis

   (a) New policies have to be designed to counteract this and attain social mix which is at the basis of good Town Planning Practice

3   Poverty exclusion marginalisation and disenfranchisement the result of past policies, need to be tackled on the basis of positive discrimination through various measures including -

      (a)   Capacity building
      (b)   Adequate funding
      (c)   Re-design of the built environment
      (d)   Creating new opportunities for constructive involvement
      (e)   Landscaping and urban re-design
      (f)   Adequate communications/transport systems
      (g)   Establishment of participation fora
      (h)   The adoption of an area-based district community planning approach

Current constructive policies of Dublin Corporation include -

    (a)   Buying houses for local authority tenants in "middle class areas" which if well managed can make a valuable contribution to social integration

    (b)   The introduction of estate management in local authority built estates   Given the resources needed of -
        (i)   Capacity building
        (ii)   Re-design input and
        (iii)   Adequate funding
            this innovation can be a major contribution to urban renewal and re-building of the physical social and environmental fabric

    (c)   Tenant purchase of local authority built houses - this also plays an important part in raising standard and expectations generally

A major investment is need in preventative measures such as the provision of improved facilities and opportunities for youths   Such measures have been proven to be cost-effective   Savings of up to 500% have been demonstrated in preventative programmes   Across the board cuts in government spending which have occurred in the relative recent past are most likely to have had seriously exacerbated social problems in already marginalised urban communities

A key question which has to be asked is what extent has the present policy "gentrification' of Dublin's Inner City without the involvement of the "host" communities resulting in the re-location of many of the inner city residents in suburban areas (sometimes deficient in community facilities and removed from services, long established community support systems family and kinship), resulted in increased poverty and marginalisation

We have now an inner city and some suburban communities which demonstrate serious malfunction and debilitation illustrated by

(a) Lack of constructive involvement together with wasted personal resources and skills

(b) Serious breakdown in traditional values and social cohesion

(c) A loss of the richness associated with mixed land-use diversity traditionally associated with inner city areas

(d) A loss of cultural diversity

(e) Ecological degradation habitat loss and increasing loss of species richness in the city and particularly in the inner city areas The degradation of the historical environment is coupled in degradation of the built environment

(f) The creation and perpetuation of a culture of state of dependency together with a loss of entrepreneurial drive

(g) Increased anti-social behaviour demonstrated by increasing crime rates and addiction rates, resulting in a further reduction in quality of life

(h) Increased cost to the tax payer due to the necessity of providing an increased range of support services and punitive measures attempting to constrain increased levels of crime

In a keynote presentation **"Investing in Children, Youth and the Inner City The Butterfly effect"**[70] Lynn A Curtis President of the Milton S Eisenhower Foundation stated that

> *"based on scientific evaluations over the last two decades, the policies that work can be summarised as investing in people - especially children and youth - and using those investmen much as possible for reconstructing our cities as part of what now have become new natural economic priorities"*

In developing sustainable programmes nationally we must get away from the over simplistic ideologically bound language of right and "left and the ' isms" of the past and move to a more rational assessment of all costs and benefits in devising programmes to tackle exclusion   The application of preventative programmes over extended periods of time have never been fully assessed against the costs of not providing them   Such programmes must be developed outside the realm of party politics on a consensus basis   It should not be possible for perfectly good functional programmes to be dismantled because of a change of government

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[70] O E C D Dublin Conference of the European Foundation (18-21 October 1993) Partnership for People in Cities

One of the factors which at present is militating against adequate public participation is the relatively short time-scale which the European Union is insisting upon in relation to drawing down funds for specific programmes. It is necessary to modify the time-scales to allow an adequate period without which exclusion is peripheralised not eliminated.

THE FINGLAS ENLIVENMENT PROJECT AS A MODEL FOR AN AREA BASED PLANNING APPROACH

The **"Finglas Enlivenment Project"** was an area-based pilot community planning project which was operated by Dublin Corporation in partnership with the Finglas and District Chamber of Commerce and Finglas Community Groups between 1987 and 1994. The project had a dramatic effect on the area as follows -

- At the start of the project the village centre was in serious decline with many derelict sites and vacant premises. Finglas town centre is now thriving with full occupancy of premises. Buildings have been renovated giving an affluent appearance.

- A strong and positive area identity has been developed following a re-discovery of the rich history and heritage of the area. Heritage books were published with local youths working on a FAS sponsored scheme.

- Major environmental awareness projects led to -

  - The establishment of a community tree nursery (also a FAS Scheme)
  - The restoration of historical buildings which had been under threat
  - The winning of a Bord Failte Tidy Towns award
  - The winning of the Guinness Dublin Chamber of Commerce sponsored Tidy Districts Award (Won by Lakeglen Finglas South)

- Projects which were part of the Finglas Enlivenment Project won prizes in the A I B Better Ireland Awards

- The Finglas Enlivenment Project was the inaugural Irish Planning Institute "Planning Achievement Award" in 1993, and was included as one of the case studies in the report "Strategies for Housing and Social Integration in Cities" (OECD 1996)

- The project placed strong emphasis on participation through the development of many projects including arts initiatives   A renewal project developed in Clondalkin by Dublin South County was modelled on the Finglas Enlivenment Project approach   At present the "Ballyfermot Renewal Project" is proceeding along similar lines

The key underlying concepts in the local area-based, community-planning Finglas Enlivenment Project were:-

- *Community Participation*
  the community has a tremendous range of resources and skills
  Planning can operate more effectively if these skills and resources were utilised

- *Creating Awareness*
  on the part in the community of the important role which it and individual groups and associations can play in shaping their own environment

- *Improving Communications, networking and creating a wide range of partnerships*

- *A "hands on" approach by Planners*
  increasing the amount of time spent working with the community

- *Emphasising and highlighting positive community elements and resources*
  as a basis on which to go forward, while at the same time tackling underlying problems

- *Using exhibitions, festivals, pageantry and the Arts as vehicles to reinforce or develop underlying concepts and local identity*

- *Consultation, i.e. listening*
  to ideas and an openness in taking ideas on board

- *Identification of key groups, associations, individuals and "prime movers"*
  so that they can make a full contribution to the process of renewal, Education and training in leadership and developmental skills

- *Project Approach*
  Instead of trying to implement a grand strategy or ambitious plan in the first instance the approach seeks to identify and make operational individual projects at many levels   These projects are employment creating

- *The role of the Planner can vary*
  informing promoting facilitating encouraging steering co-ordinating planning managing consulting - providing whatever input is called for by the circumstances

- *Constructive Involvement*
  Releasing the energies of the community in a constructive way
  Focusing on the community as a resource to realise its potential on a self-help basis

- *Distribution of information*
  relating to the built environment, the natural environment, history/heritage of the area

- *Compiling and inventory of resources*
  e g positive attitudes of the community, rich history and association with the Arts educational facilities, training centres, vibrant business association youth organisations, strong focus and identity with the town centre

- *Developing a long-term approach/strategy*

- *Planning with rather than for the community.*

- *Creating goodwill*
  and changing the community's attitude towards the planning authority, breaking down barriers

- *Improving community self-image and the public perception*
  of the area through a process of media management and projection of positive images

- *Setting New Standards*
  for the design of buildings and their environment, street furniture hard and soft landscaping

- *Conservation*
  of important buildings

- *Competitions*
  e g inter-area environmental, garden, shopfront, architectural, floodlighting

- *Creating and Strengthening Identity*
  with the area and pride of place

- *Community Gain*
  the perspective of gain for the community is emphasised   Advocacy of the community perspective becomes important

- *Identification of the perceived needs*

   of the community through dialogue This complements the process of need identification through comparisons with other areas and the implementation of the ideas of experts

- *Sponsorship*

   As funding from external sources is limited at the outset, sponsorship by local business play a major role

- *Attitude Perception of the Planner*

   Perception of the community as a positive and constructive force for change and improvement

- *Bottom up Approach*

   it is a bottom-up as opposed to a top-down approach

- *Pro-active approach*

   to community needs in Planning

- *Team work approach*

   at departmental and interdepartmental levels within the catalyst key organisation in this case Dublin Corporation

- *Liaison and networkworking*

   with local key groups organisations/individual community and business leaders/state and semi-state bodies

- *Discussion of common goals and objectives*

   bearing in mind the primary objectives set out Improvement in the physical and natural environment and quality of life of the community by a process which places primary emphasis on the constructive involvement of community groups, organisations, associations and individuals working in partnership with statutory agencies and commercial interests

- *Creation of awareness*

   by various means of what is involved in the process, e g local newspapers, notices in Library, exhibitions, pageantry/festivals, public launches press briefings

- *Facilitation of*

   the development of structure within the "prime-mover" organisations to facilitate the process of renewal

- *Preparation of briefs*

   for specific projects identifying inputs from within the community and those needed from without

- *Provide for training*

   of local leadership to minimise dependency on externalities and providing for long-term locally viable and sustainable projects

- *Provide a framework*

  which develops networking between key groups, organisations and individuals (e g the residential and business community, or community and the arts), because of the value to be reaped from inter-groups Latticing" This provides for coherence of approach and obviates negative response due to lack of knowledge and poor communications

- *Continuously record changes*

  taking place to quantify achievements - revise goals and objectives as appropriate

- *Periodically revise*

  audit of positive characteristics and resources as a platform for moving forwards

- *Facilitating the emergence of*

  (a) greater consensus in approaches to solving problems
  (b) the identification of obstacles which militate against the creation of a better environment

- *Successfully sourcing funding*

  and sponsorship form within and without the community

- *The ability of the local community*

  to utilise fully political structures for community benefit

Ideally, all organisations groups and individuals should feel that they have meaningful roles to play in shaping their environment Empowerment, releasing energy individually and collectively in a constructive way, has immense benefits for the individual and the community The opposite approach can present a feeling of "alienation and exclusion" often felt in urban communities

Innovative elements of the Finglas approach:-

- A more pro-active role being developed by the Planning Department in local affairs

- Allowing linkages to be developed at local level between statutory agencies organisations, groups and individuals

  Rather than the statutory agency taking control of an individual project, local groups were encouraged to take control from an early stage and create a sense of self-reliance

- The absence of sole-dependency on monitory funding from without the community ensured long-term sustainability for the projects

- Recognition that the approach required a long term time scale and that events and results would not happen overnight

The local/district area-based approach by its nature is time consuming For it to be expanded, additional personnel are required, committed to the objectives and ideals of a community planning approach

THE PLANNERS' SKILLS -

The Planner has certain skills which he/she can use in implementing a community planning area-based approach These include

1.   The ability to set goals - and objectives to achieve these goals

2.   The ability to organise ideas and materials

3   The ability to present ideas with a high quality of visual presentation

4   Bringing to bear an analytical approach together with the ability to evaluate options as a basis for the allocation of scarce resources

CONCLUSIONS

1   A market driven approach to planning has not worked and of itself without proper intervention cannot work

2.   Planning, underpinned by Agenda 21, can begin to form the rational foundation for making progress

3.   The Development Plan of the 21st century should be Agenda 21 driven and as the corporate document of the Planning Authority should comprehensively address development issues relevant to that authority's functions under the headings, Economic Social and Environmental i e sustainable development The relatively narrow physical focus that has tended to characterise Development Plans in the past is inappropriate to the Agenda 21 era i e the 21st century

4.   The destruction of Greenbelts in the Dublin area, the continuous reduction in open spaces as a percentage of the total urban area, re-zoning decision which conflict with Development Plans militate against the achievement of sustainability

5   Local authorities should have the power to appoint an environmental auditing officer with a similar role to the finance auditor

6.   Planning legislation should be re-drafted to represent the changed situation brought about by Agenda 21 and the key development in thought and process represented by the Earth Summit   It is necessary to provide for non-land-use considerations in development plans and development control   Local authorities should be empowered though legislation and finance to own and invest in defined categories of pro-sustainability enterprises

7.   Sectoral Interests such as -
     Agriculture
     Tourism
     Industry
     Economic Development
     Trade Unions

     have to be reconciled to the principles of sustainability and represented in any Sustainability Fora and processes which are held

8   New structures are needed to facilitate the decision making process. Best practice shows that the setting up of fora at various levels with all interests presented is the best solution (i e   multi-stakeholder approach)

9   In the city context the concept of the *Diversified Extended District* approach as defined in this paper can fulfil many of the objectives of Agenda 21   Existing districts with appropriate modifications and extensions can form the basis of the new concept

10   Local partnerships which were set up under the programme for Economic and Social Progress in 1990, could with appropriate adjustments and safeguards, facilitate the process of the operation of district fora

The "Finglas Enlivenment Project" area-based community planning approach incorporated many of the Agenda 21 principles and is a suitable model on   which   to build a *Diversified Extended District* approach