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Sustainable Development in Practice

Introduction

The aim of this essay is to provide a critical appraisal of the UK Government's 2005 sustainable development strategy 'Securing the Future' (2005). The overall approach of this document is considered; there will then follow a focus on Chapter 6 From local to global: Creating of sustainable communities and a fairer world. Particular consideration of this section is in relation to tackling global poverty and actions framed by the Millenium Development Goals (MDG's). Other international agreements ensuring human rights, democracy good governance and other key areas also considered.

With the above in mind there is a critical appraisal of sustainable development theory and practice leading to proposed conclusions. Any assertions are made providing a balanced view with supporting evidence where possible. Suggested merits or deficiencies of Securing the Future will be evaluated

References are made to other publications some of which have been referred to in the previous assignment. Equally there are some reminders of key events and documents relating to 'sustainable development' as a concept and it's implementation.

Reminders of origins

In 1987 the World Commission on Environment and Development (WCED) published a document entitled Our Common Future – which is also called the Brundtland Report (Brundtland Report 1987). From this document came a definition of sustainable development which is generally adopted in the world community ie. 'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own need'.

The United Nations Conference on Environment and Development (UNCED) also known as 'the Earth Summit' hosted in Rio de Janeiro in 1992 produced the Agenda 21 document, which describes sustainable development as the integration of the 'three sustainabilities: social, ecological and economic. These components intersect diagrammatically as a triad Venn diagram of three equally overlapping circles.

The whole document ‘Securing the Future’

It is helpful to consider the development of the UK 2005 strategy before considering the document itself.

After the Agenda 21 was published the UK Government produced ‘Sustainable Development: The UK Strategy’ in 1994. In 1996 national ‘Indicators of Sustainable Development’ were defined. In 1997 the new labour Government reviewed the national sustainability indicators and produced a set of headline indicators and another document, ‘A better Quality of Life’ in 1999. In this document the UK strategy included social aspects of sustainable development where the 1994 strategy paid more attention to environmental issues whilst also encouraging economic growth. A Better Quality of Life highlighted four primary objects and it was clear that economic growth was now associated with sustainable development more than in former strategies. The prime focus of this document was its own citizens. As will be discussed further a global concern is now more evident in the 2005 strategy.

The new 2005 Securing the Future declares many aspirations, but does it provide details of how these aspirations can or will be achieved? It is encouraging that ‘sustainable development’ is now more integrated into UK political process as it is in the much of the global community.

The 2005 strategy, Securing the Future highlights four ‘key priority areas’. Three of these priority areas demonstrate an awareness of the three factor concept of ‘sustainable development’: Sustainable consumption and production (ECONOMIC), Natural resource protection and environmental enhancement (ECOLOGICAL) and From local to global: building sustainable communities (SOCIAL).

The fourth area being Climate change and energy. This emphasis represents a major development and shift of focus from the previous strategy. The economic emphasis appears a first priority in the listing. Climate change follows, then sustaining the environment followed by sustainable communities.

Securing the Future has a list of five guiding principles. This compares with ten in the 1999 strategy. The fifth of these ‘Using sound science responsibly’ is new, where the previous four resonate the ten principles of the 1999 strategy.

The aim of the UK Government strategy is to enable a better quality of life through sustainable development. There is acknowledgement that making wrong choices now will detrimentally influence future generations. The 2005 strategy highlights individual responsibility in making right choices. Economic growth and prosperity should not be in conflict with sustainability strategies.

In summary the 2005 strategy aims to provide long term solutions by beginning to take preventative action now.

The strategy defines ‘68 indicators’ through which progress can be measured and monitored in the four priority areas. These are available in the Sustainability Development Indicators in Your Pocket (2006) booklet which is a useful technical

resource. This sets out the indicators measuring parameters of interest such as health, housing, employment, crime, education and the environment. This graphically illustrates the scale and challenges of sustainable development. A set of 'traffic lights' are used in the booklet to indicate whether progress is being made or not in relation to the period 1990 when the previous strategy was introduced up to 1999. From page 25 onwards each indicator is represented using a chart, with traffic light appraisal and comments to expand on progress or lack of where appropriate.

Since 1999 a large number of measures show improvement. Those showing deterioration include aviation emissions of greenhouse gases household waste, CO₂ emissions from households and road vehicles. The booklet is certainly a useful complement to the 2005 strategy

Creating sustainable communities and a fairer world

Sustainability as defined by Perman et al (2003) is equivalent to 'the sustainability problem'. This is considered in terms of how the global community can begin to alleviate poverty in ways that are not detrimental to the ecosystem or the local environment. The definition continues to relate this to securing the economics of the future. It's interesting to note the reference to the economics of the future. This is considered in relation to problems of unequal wealth distribution.

Perman et al (2003) considers that the mechanics of economic systems occurs in the natural environment which itself is part of the universe, which itself is deemed an environment. The biosphere that human communities function within is considered a closed system which in turn is defined as a thermodynamically 'closed system'. Perman et al describes issues of human development in relation to both the present and future generations. The problems that result from human activities on the global environment demonstrate the interdependence of this environment on any human economy. This inescapable reality has to be considered in any strategy for sustainable development. In other words human activity is affected by the environment and vice versa. The question is how we minimise the damage to the environment and maximise the growth in the economy. For any economy to be sustainable the natural environment has to be able to deliver the resources. Perman et al refer to these as 'services'. These services remain available for an indefinite period in human history. There are examples of societies that have actually collapsed mainly due to the dwindling of natural resources.

Lele (Lele 1991) maintains that current understanding of sustainable development is not consistent. Sustainable development is considered as two concepts ie sustainability and development. Sustainability can be thought of as referring to sustaining anything sustaining the ecological system and sustaining the social basis of human life. Development can be considered as process and objectives. Process meaning growth and objectives relating basic needs. Lele considers these in terms of contradictions and things that are not of significant importance. The author looks at the concept growth of sustainable development as three parts – development, sustainability and sustainable development. Lele maintains that in terms of ecological considerations and sustainable development we need to be prepared to consider 'trade offs' which may have to be made. Lele challenges the concept that poverty

accelerates. Lele also questions the assumptions that economic growth represents real development and that economic growth reduces poverty. This view is held by others but is not reflected in the UK strategy although it considers environmental implications of economic development. There is the predominant awareness and realisation that without economic growth there are not the resources or finances to cater for the environmental strategies. Strategies such as reforestation, preservation of species and technologies that help preserve the environment require large amounts of finance.

The Brundtland Report (1987) reminds us that far from needing the cessation of economic growth when considering sustainable development we need to recognise that the problems of poverty cannot be solved unless we have a new era of growth and development - where developing countries play a large role and also share in reaping large benefits.

Securing the Future (2005, pg 119) summarises this section of the document with the following statement. 'Creating sustainable communities everywhere is a challenging task. It requires us to integrate the delivery of social, economic and environmental goals, to take a coordinated approach to delivering public services that work for everyone, including the most disadvantaged, and to think strategically in the long - term'.

Section on The Global Dimension

The beginning of the chapter highlights that more than 800 million people go hungry daily. Of these 300 million are children. 8% of these children are hungry due to famine or other crises. More than 90% are due to chronic issues and suffer malnourishment long term. 114 million primary age children in the world are not provided with schooling. Much of the chapter considers addressing UK domestic needs in areas such as deprivation in the UK and the gap in life expectancy between north and south of the country.

A key feature of the strategy is to encourage civil society and greater public participation in the process of decision making. The UK government strongly supports the Rio Declaration (1992) which aims to improve access to information , democratic decision and greater participation in environmental matters. The UK is one of the founder nations of the Partnership for Principle 10. This Partnership is open to all international governments and international organisations. To enhance this it is positive to see that the UK strategy (2005, pg 140) includes the following commitment 'the Government will continue our bilateral and multilateral support for strengthening anti - corruption capacity in developing countries'. Corruption is still a major contribution to global poverty, often where there are adequate 'local' resources to combat this human challenge. No matter how much aid and support is provided if a nation is riddled with corruption those that need the resources don't get them. Any aid finance or resources may well end in the clutches of rebel factions or regimes that caused the poverty through oppression, corruption and poor government decisions. Failing and corrupt governments will often oppress the most needy in an attempt to preserve their dwindling domestic security. From excessive taxes to military intimidation these strategies are employed to retain power in a threatened economy. Although the UK Strategy highlights the need for international transparency the

MDG's won't be achieved in the most needy areas of the world unless more financial resources are released for international development. The UK government aimed to raise Official Development Assistance (ODA) from 4.1 billion in 2004/05 to £6.5 billion by 2007/08 thus making progress towards the United Nations 0.7 per cent target for ODA as a target proportion of Gross National Income (GNI). There are other encouraging components outlined which aim to address slum dwelling and general global poverty.

This UK Strategy (2005, 143) proposes an integrated approach. This is represented by 'enabling, engaging, exemplifying and encouraging'. This is a comprehensive and effective model, the elements of which are clear including Overseas Development Aid and International Finance Facility. There could be more emphasis on specific issues of tackling world poverty, oppression and political instability which are often the primary source of poverty in the first place. There could also be more detail on the mechanics of how poverty can be reduced on a more practical level. There is a strong link between poverty and reduced environmental preservation. Without considering energy and ecology we cannot construct a balanced and effective strategy. Since the industrial revolution about 200 years ago there was a marked increase in the use of fossil fuels. This consumption was in both transport and commercial production. Domestic households in industrialised nations also consumed enormous amounts of fossil fuels for heating and cooking. There are few hunter – gatherer communities left today. Since the agricultural revolution about 10,000 years ago the natural ecosystem has been gradually replaced by a human - controlled ecosystem. The consumption of fossil fuels has brought atmospheric pollution which itself damages plant growth through acid rain amongst other environmentally damaging changes. Trees are a significant contributing influence on the delicate and vulnerable atmospheric 'carbon balance'. Carbon exists in the atmosphere primarily as carbon dioxide and some carbon monoxide. Carbon monoxide is a product of incomplete combustion of fossil fuels. Livestock and other animals also produce methane from digestion which is another source of atmospheric carbon. In addition to these gases oxides of nitrogen and sulphur are also produced as mineral fuels are burned. The addition of oxygen in the process of combustion releases valuable energy that can be used to heat, cook and of course to do 'work'. This work is employed in manufacturing, power generation, domestic heating and cooking. It is difficult to measure and determine the full detriment to the environment that atmospheric emissions due to fossil fuel consumption cause, but the effects are evident and startling. Apart from physical deforestation which is happening at an alarming pace many of the major forested areas of the globe are dying. Trees remove carbon dioxide from the atmosphere during the day and produce oxygen – during the so defined 'light reaction'. At night the dark reaction proceeds where only carbon dioxide is produced due to the absence of light dependent photosynthesis. Ultimately we are dependent on these energy catching 'producers' (like other photosynthesising plant life), for our sustainability. This doesn't seem to be acknowledged sufficiently in the UK Strategy document. Human appropriation of Net Primary Production (NNP) needs to be considered more. NNP is the total energy captured by plants from the sun which is equivalent to the 'food' for the global ecosystem. 1.02% of solar energy becomes part of the 'food' supply. The total surface of the globe that is producing (covered by live vegetation) is quickly diminishing. Therefore the NNP is diminishing. The energy acquisition areas of our planet are therefore shrinking. This has sobering implications. About 39% of global NNP is appropriated by humans. The link between sustainability and NNP is

starkly obvious as we consider the links. Food webs and food chains ultimately provide food and resources. When the environment suffers so do human communities. The most vulnerable communities will clearly be the poorest. Addressing poverty needs to consider more seriously the preservation of our delicate environment upon which we depend.

Food production systems may need to change. The most efficient food production system is the growing of Asian rice, with an energy output: input ratio (O / I) of 50. This compares significantly with frozen fish production which has a ratio of 0.05. It is therefore very inefficient. Primitive agriculture has an O/I of 20 contrasting modern agriculture which has an O/I of 2. We therefore need such considerations in our sustainability strategies in future. The question arises as to how long can current levels of NNP appropriation be sustained? The answer will be proportional to the strategies that we put into place now to preserve the environment.

For many years it was considered that programmes to address human poverty could operate independent of issues relating to the natural environment. Conservation of natural resources was seen as a less important issue or not relevant at all in the face of human need. Now we realise that human needs and poverty will only exacerbate as the environment suffers.

Victor (1991) reviewed the main theoretical considerations in sustainable development. He proposed that 'natural capital' is not adequate as a description of the link between the economy and the environment. Victor aimed to challenge ecological economists to develop sustainability indicators (SIs). The assumption is made that degradation of the environment is consistent with strategies for sustainability. The condition for this is that certain rules are followed. Hartwick (Hartwick, 1990) provides an example of a proposed set. Victor summarises that natural capital measurement may not be able to encapsulate all the necessary economic functions of ecological systems. This is not surprising. A simpler model would be possible if the environment and its preservation were seen as a non negotiable priority. To consider all explicit and implicit parameters in sustainability would need an almost infinitely complex algorithm.

The UK 2005 strategy reflects these changes in values and priorities more obviously in the text of the document.

Ensuring it Happens

This chapter in Securing the Future 2005 is a helpful section reminding us that strategies are only of value if there is relevant and effective action. A list of indicators to enable monitoring of progress in the UK Government Strategy is provided and tabulated towards the end of the chapter with lists of targets and which departments will be responsible for these targets to be met. This is a very clear description, summarising proposed actions. In relation to helping eradicate extreme poverty and hunger for instance the lead department will be the Department for International Development (DFID). The High level target is to meet Millennium Development Goals (MDG's).

It is intended that the strengthened Sustainable Development Commission (SDC) should act to ensure that progress is reported towards implementing the UK framework and the commitments defined in the UK strategy.

Summary comments

The Sustainable Consumption Roundtable report (I will if you will, 2006) emphasises that sustainable development must include objectives that are fair for everyone. The report also defines that the long term goal should be to produce business models that consider the environment and maintain sustainable economy. This is set out as the vision of the UK Government in this document Securing the Future 2005 which is the sobering challenge of the century. The UK with the rest of the Global community needs to live within its means and enable members of all communities fulfil their innate potential.

The document is comprehensive and helpful in its layout but there could be more specific detail of remedial and protective measures to ensure the success of each of the sustainability elements.

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