POVERTY – ENVIRONMENT NEXUS: EUROPEAN UNION'S DUALIST APPROACH

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ABSTRACT

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This thesis analyses the interactions between poverty and environmental degradation and the responses given by the international organisations and the EU. The analysis on poverty and environment, at the conceptual level and their interactions demonstrates the interrelatedness of the two issues and the need for an integrated and coherent response towards poverty alleviation and reversing environmental degradation. International organizations such as UNEP, UNDP, WB, GEF, CSD, OECD and the EU have the two issues on their agenda and have devised comprehensive sets of policies to achieve sustainable development objectives.

The response of the international actors and the EU appears to be effective, however the analysis exemplifies the fragmentation and lack of coherency, as well as the existence of some policy areas that still fail to integrate poverty – environment interactions. Moreover, the reflection of the said policies into decisive actions and implementation has also remained limited.

Keywords: Poverty, environment, sustainable development, PRSPs, European Union

ÖZ

YOKSULLUK – ÇEVRE KISIR DÖNGÜSÜ: AVRUPA BİRLİĞİ'NİN ÇİFTE YAKLAŞIMI

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Bu çalışma yoksulluk ve çevresel bozulma arasındaki etkileşimi irdelemeyi, uluslararası kuruluşlar ve Avrupa Birliği'nin her iki konuya yaklaşımları ile bu sorunsala vermiş oldukları yanıtları incelemeyi amaçlamıştır. Çevre ve yoksulluğun kavramsal düzeyde ve karşılıklı etkileşimlerinin incelenmesi, aralarındaki bağlantılar ile yoksullukla mücadele ve çevresel bozulma eğiliminin tersine çevirilmesinde tümleşik ve tutarlı bir yaklaşımın gereğini ortaya koymaktadır. BMÇP (UNEP), BMKP (UNDP), DB (WB), KÇF (GEF), SKK (CSD), EİKT (OECD) ve Avrupa Birliği gibi uluslararası kuruluşlar gündemlerinde yer alan bu iki soruna çözüm olarak sürdürülebilir gelişme hedeflerine erişmeye yönelik kapsamlı politikalar geliştirmişlerdir.

Bu inceleme kapsamında, uluslararası aktörlerin ve AB'nin yoksulluk-çevre etkileşimine yönelik politikalarının her ne kadar etkiliymiş izlenimini verseler de, aslında kopukluklar içerdiği ve bütünleşik olmaktan uzak olduğu örneklerle açıklanmıştır.. Çalışma, çevre-yoksulluk etkileşiminin içselleştirilemediği politika alanlarının varlığına ve ayrıca, sözkonusu politikaların kararlı eylemlere ve uygulamalara dönüşümünün de sınırlı olduğuna işaret etmektedir.

Anahtar Kelimeler: Yoksulluk, çevre, sürdürülebilir gelişme, PSRP, Avrupa Birliği

To my beloved father, I wish you were here to see it.

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ABBREVIATIONS

ACP African – Caribbean – Pacific CBD Convention on Biodiversity CBOs Community-based Organisations

CSD UN Commission on Sustainable Development

DAC Development Assistance Committee

DG Directorate General

EAGGF European Agricultural Guarantee and Guidance Fund

EAP Environmental Action Programme

EC European Community

ECOSOC UN Economic and Social Council EIA Environmental Impact Assessment

EMU European Monetary Union

ERDF European Regional Development Fund

ESF European Social Fund EU European Union

FIFG Financial Instrument for Fisheries Guidance

FSPs Full-size Projects

GDP Gross Domestic Product
GEF Global Environment Facility
GNI Gross National Income
HD Human Development
HDI Human Development Index

HP Human Poverty
HPI Human Poverty Index

IBRD International Bank for Reconstruction and Development ICSIS International Centre for Settlement of Investments Disputes

IDA International Development Association IFC International Finance Corporation

IPCC Intergovernmental Panel on Climate Change

ISPA Instrument for Structural Policies for Pre-Accession Aid

MDGs Millennium Development Goals

MIGA Multilateral Investment Guarantee Agency

MSPs Medium-size Projects

NATO North Atlantic Treaty Organisation NGOs Non-governmental Organisations

NUTS Nomenclature of Territorial Units for Statistics

ODA Official Development Assistance

OECD Organisation for Economic Development and Cooperation

PEI Poverty and Environment Initiative

PHARE Poland-Hungary Assistance in Restructuring their Economies

POPs Persistent Organic Pollutants PRSs Poverty Reduction Strategies PRSPs Poverty Reduction Strategy Papers

QMV Qualified Majority Voting

SAPARD Special Action for Pre-Accession measures for Agriculture and

Rural Development

SEA Single European Act
SEM Single European Market
SGP Small Grants Programme

SOFA FAO State of Agriculture Report

UN United Nations

UNCED UN Conference on Environment and Development UNCHE United Nations Conference on Human Environment

UNDP United Nations Development Programme
UNECE UN Economic Commission for Europe
UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate Change

WB World Bank

WCED UN World Environment and Development Commission

WSSD World Summit on Sustainable Development

WTO World Trade Organisation

CHAPTER I

INTRODUCTION

The aim of this study is to analyse the relationships between poverty and environment, the effect of environmental policies on poverty alleviation and vice versa, the international response to the poverty- environment interactions and the European Union's (EU) approach on the issue with an enlargement perspective.

The analysis is based on literature review of scholarly papers, the official documents of the European Union and international organisations as well as internet-based information sources and electronic databases. While it strives to provide a comprehensive picture of the existing sustainable development discourse, it is important to note that the analysis is more at the policy level than implementation in detail.

This study will initially provide the background for poverty and environment definitions and will briefly refer to the ongoing debate on whether income or consumption solely should be used as the definition of poverty or should other factors such as social exclusion be considered. The issue of poverty is complex in nature, both due to the reasoning behind it and to the consequences thereof. Poverty is a concept that has been at the centre of many a debate, not only in the last two centuries, but historical context as well. Initial definitions of poverty, starting from Seebohm Rowntree and Adam Smith, only considered the income levels when identifying the poor and the non-poor. There has also been other approaches, which took other issues such as inequality, freedom of choice, vulnerability, empowerment and participation into account in the definition of poverty.

During this analysis contrasting views on poverty will be analysed, since some believe income poverty is limited in itself due to only providing the information that the people are either below or above some pre-established poverty-line without adequate information regarding their welfare or well-being. On the other hand, others comment that including factors such as vulnerability into poverty measurement makes the results highly subjective and not reliable in assessing the extent of poverty issues.

During this study, poverty will be considered as an all-inclusive concept, and the focus on the issue will be from a social exclusion perspective and on human poverty, rather than only income poverty. For the purpose of this study, the definition of poverty will include freedom of access to resources, freedom of choice, freedom of access to social services such as healthcare and being able to raise their voices, empowerment and participation.

Investigation of poverty as well as the environment concepts will be followed by a brief analysis of a selection of poverty – environment interactions. The focus will be towards land degradation, biodiversity loss, pollution and climate change. The poverty-environment nexus concept, referring to the relationship between poverty and environment as "a vicious downward spiral", the poor as both agents and victims of environmental degradation, will both be analysed and challenged. The nexus concept, of the Brundtland Report, claims the poor are a cause of environmental degradation as they depend on the natural resources to survive, but are at the same time victimised by it as they are obliged to continue living in the degraded environment and they suffer with no means to escape. This analysis, although in partial agreement with the opinion that the poor are a partial reason of environmental degradation and are adversely affected by environmental degradation, will be challenging the idea in the context that the reasons behind degradation caused by the poor are not purely caused by the utilisation of resources for their survival.

It is the view of this analysis that more often than not, the poor are over-exploiting resources to satisfy the needs of the non-poor. The existing and ever increasing demand for natural resources in the developed parts of the world has made it "acceptable" for the less developed countries, which are typically less concerned about environment than development, to provide the resources and services without taking environmental concerns into consideration. This analysis will argue in the following sections that development-focused countries are traditionally less environmentally-conscious. These countries unfortunately, provide resources to the more developed nations, at lower cost, as they do not take environmental impact measures or even labour rights, thus have considerable adverse impacts on the world's scarce and depleting resources as well as the people whose lives are dependent on them. The same chapter will also provide the emergence of the sustainable development concept and its importance as it relates to policy and implementations thereof.

In the third chapter, furthering the debate, the study will review the responses of some international actors (i.e. GEF, World Bank, UNDP, OECD etc.), regarding poverty alleviation (subsidies, grants, funds, alternative income generating activities trainings etc.) in relation to environmental degradation/conservation. The responses of the said organisations will be analysed with a point of view in an attempt to assess their effectiveness as well as their influence on the international discourse. The same section will be critical in its review of the organisations both regarding their policies and regarding the implementation.

The fourth chapter will be looking into the European Union's approach to the poverty – environment nexus, both within the confines of the supranational entity and with respect to its international relations with other actors and other countries. The analysis will aim to demonstrate the definition accepted by the EU and its implications on policy. The analysis will be trying to identify whether the EU, acknowledging the interactions between poverty and environmental degradation, addresses the two issues together under its Environmental Policy (towards Sustainable Development) or not. The analysis will also review the EU with

respect to its international relationships with developing countries, whether it expects the two issues to be tackled together for the achievement of sustainable development objectives or not. The same chapter will also try to demonstrate the EU as an international actor in sustainable development discourse and its position at the World Summit on Sustainable Development (WSSD).

The fourth chapter will further attempt to analyse the effects of EU enlargement with respect to poverty and the environment of the EU. The analysis will be reviewing the enlargement from a poverty and social exclusion perspective as it may relate to the EU as most of the new EU members are ex-East Bloc countries, with varying levels of economic performance and political stability, which may result in the EU having to face a different dimension of poverty. The poverty concept that shaped the notion of the international organisations has been considerably different compared to the poverty issues within the former EU member countries. It will be argued that the natural-resource dependent poverty or poverty coupled with severely limited access to resources such as basic energy and clean water, has never been the issue for EU, which in turn shaped their approach towards poverty and poverty alleviation differently than the other organisations. With the enlargement, although still not in the degree observed in the developing or underdeveloped countries, this analysis expects to demonstrate that there will be a change in that situation. These countries, although now are members of the EU, do come with their problems such as non-compliance in some of the environmental directives, fragile economic situations, higher poverty and unemployment rates and big regional disparities compared to earlier members of the EU. This analysis will attempt to show that not only implementation but also policy making at the EU level will need to be changed and become more difficult to accommodate the needs of all members as well as the EU's international commitments

Moreover, with the EU membership, as these countries have an emerging donor role, a responsibility to provide funds for developing countries, the internal dynamics of the EU will need to be re-oriented. This analysis will be looking into

the issue to identify potential differences in the approach of the EU towards its member states and other countries that it is cooperating with. In a world that we are yet to see the development aid at levels targeted even by the so-called developed countries, it is a challenge for the new EU member countries, to both continue fulfilling the EU criteria and expectations, especially doing this without foreign aid, and to fulfil their donor responsibilities. The same is likely to become a challenge to the enlarged EU, as elevated differences/disparities between regions (inside countries and between countries of the EU) and the environmental issues as they relate, will necessitate careful thinking and timely actions, not aggravating differences and raising angry voices, yet providing a solution.

It is important to note that this study will be mainly focusing on EU at the policy level. Implementation, albeit is a part of the analysis throughout and a very important aspect in the realisation of the sustainable development targets, both for the EU and globally, will not be investigated in detail. The individual implementation of the sustainable development policy requirements by nation states is one of the main aspects for achievement of global goals, which unfortunately is out of the scope of this analysis due to lack of available data regarding implementation for the entire member states at the time of the analysis.

CHAPTER II

POVERTY AND ENVIRONMENT

Poverty and environmental interactions has been on the agenda of developmental and environmental studies, often in both, particularly in the last few decades. This chapter will initially focus on defining the two concepts and to analysing, although selectively, some of the fundamental interactions between the two with a view to investigate how the definitions and the said interactions shaped the international policies towards poverty alleviation and environmental conservation.

2.1 The Poverty Concept

2.1.1 Brief Information on Poverty – the concept

Poverty is one of the most controversial and debated words in developmental studies. It has been defined in various different incarnations, all definitions being challenged endlessly, and it has meant something here and another thing elsewhere; poverty became a pejorative word and one with sympathy, all at once and all together.

The Oxford English Dictionary defines poverty as "the state of being poor – having very little money or not having enough money for basic needs¹."

More broadly, poverty can be defined as the state of being without the necessities of daily living, often associated with need, hardship and lack of resources across a wide range of circumstances. For some, poverty is a subjective and comparative term; for others, it is moral and evaluative; and for others, scientifically established. The principal uses of the term include:

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¹ Oxford Advanced Learner's Dictionary, 2002, Oxford University Press, Oxford.

- Descriptions of material need, including deprivation of essential goods and services, multiple deprivation, and patterns of deprivation over time.
- Economic circumstances, describing a lack of wealth (usually understood as capital, money, material goods, or resources, especially natural resources). Obviously, the meaning of "sufficient" varies widely across the different political and economic parts of the world. In the EU, poverty is also described and measured in terms of "economic distance²".
- Social relationships, including social exclusion, dependency, and the
 ability to live what is understood in a society as a "normal" life: for
 instance, to be capable of raising a healthy family, and especially
 educating children and participating in society.

The definitions vary from those including simply economic data to those including a broad range of concepts such as access to education, health services and resources other than those required to cover basic needs. The definitions also vary according to the perceived causes of poverty.

Poverty has been attributed to:

- Individual causes, i.e. behaviour or choices of individuals:
- Structural causes, poverty as the result of the social preconditions such as:
 - o Unequal income distribution
 - o Geographic factors
 - o Environmental factors
 - Education and skills
 - o Discrimination (with respect to age, gender, race)
- Familial causes, which attribute poverty to upbringing;
- Sub-cultural causes, which attribute poverty to common patterns of life, learned or shared within a community;
- Agency causes, which see poverty as the result of the actions of others, including war, government and the economy;

²A standard that links poverty to a net disposable income falling below 60% of the median household income (Eurostat, (2000). "Report of the Working Group: Statistics on Income, Social Exclusion and Poverty", European Statistical Office, Luxembourg, April 2000)

Political Corruption³

For the purpose of this thesis, poverty due to individual choices of persons will not be taken into account. The poverty alleviation concepts and concerns throughout this analysis will directed at the poverty occurrence not by choice but as a result of circumstances and its interactions with environmental factors and existing strategies. All other underlying reasons will be considered to be a part of existing poverty globally, though will not be referred to as such and in detail, as this analysis will mainly concentrate on people living in poverty and their interactions with natural resources. This analysis will be looking into the different approaches within the international arena particularly for natural resources-dependent poor and comparing the EU approach against the approaches of other international actors.

2.1.2 Debate on definitions and measurement of poverty, towards poverty alleviation

The different definitions of poverty have been the subject for long and interesting debates on the concept. Although the development studies seem to be concentrating on issues related to the poverty only in the last two centuries, in fact the issue has been an important consideration, both among academics and governments even as early as the end of the 16th century. The "Poor Law", probably the first legal document on poor, was enacted in England in 1572, during the reign of Queen Elizabeth I, and even though it does not make a definitive description of poverty, it nevertheless proposed punishment of sturdy beggars and relief of the impotent poor. Neither the renewed "Poor Act" of 1834, nor the initial version of the law, which for the first time, provided "relief" to the poor (via establishing a compulsory "poor rate", overseers of relief and included a provision for setting the poor to work), managed to establish a well-functioning mechanism. Still, the Poor Law has been an important initiative and has its rightful place in history.

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³ Fields, G.S., (2001). *Distribution and development: a new look at the developing world*, Cambridge, New York and Russel Sage Foundation and MIT Press, London, pg.99.

Another early study on the issue was made by Booth, in the East End of London, in 1887, which was prompted by widespread rioting of the poor. The socialists at that time claimed one-third of the population was poor, which was a much higher ratio than the proportion of the population that received poor relief, about 5% of the population. Booth used informants, instead of direct inquiry among the poor and he categorised people into eight social classes, four of which represented different degrees of poverty. His classification went beyond pure monetary identification of the poor, encompassing more sociological concerns such as the "conditions attaining in the home and the nature and the regularity of employment".

Seebohm Rowntree in his study of poverty in York in 1899 (published in 1901) defined "primary poverty" as the "the lack of minimum necessary expenditure for the maintenance of merely physical health". Rowntree's study, has been described as the first scientific study of poverty as unlike Booth, in making his assessment, Rowntree undertook a survey of almost all of the working class families⁵. Rowntree made a distinction between what he called the "primary" and the "secondary" poverty and declared that according to his definition, nearly 30 % of the inhabitants of the City of York in England were poor⁶. In his own words:

The families living in poverty may be divided in two sections:

- 1) Families, whose total earnings are insufficient to obtain the minimum necessaries for the maintenance of merely physical efficiency. Poverty falling under this head may be described as "primary" poverty.
- 2) Families whose total earnings would be sufficient for the maintenance of merely physical efficiency, were it not that some portion of it is

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⁴ Marshall, T.H., (2003). *The Right to Welfare and Other Essays*, London: Heinemann, 1981 p. 145 as cited in C. Ruggeri Laderchi, R. Saith, and F. Stewart, (2003). "Does it matter the we do not agree on the definition of poverty? A comparison of four approaches", *Oxford Development Studies*, Vol. 31, No. 3, September 2003, pp. 243-273.

⁵ Ibid. pp. 248

⁶ Cited in Atkinson, A.B., (1975). *The Economics of Inequality*, Oxford University Press, Oxford.

absorbed by other expenditure, either useful or wasteful. Poverty falling under this head may be described as "secondary" poverty.

Rowntree's work paved the way for further definitions, which incorporated other issues into the definitions of poverty, all of which largely focus on income levels.

The main response of the European countries towards poverty, traditionally, has been the poor relief, i.e. giving aid directly to the poor people, ever since the Middle Ages. Adam Smith, in his famous work, the (Inquiry into the Nature and Causes of the) Wealth of Nations, argued on the contrary, that, economic altruism is largely unnecessary in a competitive market system, inhabited by just and prudent individuals⁸. Smith, a powerful advocate of free-market capitalism, believed in the necessity and inevitability of economic inequalities and a stratified class system. Smith's focus has always been on economic growth, aiming to improve society's welfare and that to Smith, was consumption opportunities for all. His standpoint was on conditions of production, which should provide for consumption. Smith built his entire analysis on the fact of a class society, a society composed of distinct classes with significant inequalities. However, he was critical about the existing imbalances of economic power among the social classes.

In one of his later works, the *Theory of Moral Sentiments*, Smith often spoke about beneficence as "the ornament which embellishes society" including charity, love, friendship and other forms of kindness⁹. Smith believed that, in an ideal capitalist structure, there was no need for this, however, he was also aware that

⁷ Rowntree, B.S., (1902). *Poverty: A Study of Town Life* ([1st ed 1901]), pp. 86 – 118, http://www2.arts.gla.ac.uk/History/ESH/rowntree/chap4.html (19/10/2005)

⁸ Smith, A., (1937). An Inquiry into the Nature and Causes of the Wealth of Nations, E. Canaan (ed.), NY, Modern Library, cited in S. Baum, (1992). "Poverty, Inequality, and the Role of Government: What Would Adam Smith Say?", Eastern Economic Journal, Vol.18, No. 2, Spring 1992, pp. 143 – 156.

⁹Smith, A., (1978). The Theory of Moral Sentiments, D.D. Raphael and A.L. Macfie (eds.), Oxford: Clarendon Press, 1978, cited in S., Baum, (1992)., "Poverty, Inequality, and the Role of Government: What Would Adam Smith Say?", Eastern Economic Journal, Vol.18, No. 2, Spring 1992, pp. 143 – 156.

the existing situation was far from being ideal. Thus he believed, in a less favourable situation, created by "rent-seeking capitalists and other market failures", charitable giving to the poor would be highly relevant ¹⁰.

Smith resented extreme poverty, but he also accepted it as a fact of the class society he was a part of and he had no intention to change that. Smith did not blame the poor for their misfortune. He argued however, that people actually pursued richness in order to gain status, admiration and recognition and that there are very few members of the society that are truly suffering from deprivation and lack of basic essentials for survival, and that intolerable deprivation was not a prevalent phenomenon within the market economy.

In contrast to Smith, Malthus argued that poverty was a reflection of extensive increase in the population and the poor were to blame for their condition. Malthus, in his Essay on the Principle of Population, attempted to explain the contradictions in social developments in terms of natural laws. He is the source of the famous law of progression: "Population, when unchecked, increases in a geometrical ratio. Subsistence only increases in an arithmetic ratio¹¹." This theory explains the surplus population and poverty as with increasing numbers of people, natural resources fail to be adequate. Malthus however, also claimed that the population control was made easier by epidemics, disasters and wars. Malthus argued that a system of state assistance to the poor encourages the proliferation of poor therefore an assistance system should be abolished and the control of poverty must be left to universal hunger and epidemics, to the forces of natural selection to take action.

Marx, on the other hand, argued that inequality and poverty are inevitably produced by capitalist societies and could not be eradicated without fundamentally altering the mechanisms of capitalism. The poor were not to

¹⁰ Cited in Birch, T.D., (1998). "An Analysis of Adam Smith's Theory of Charity and the Problems of the Poor", Eastern Economic Journal, Vol. 24, No. 1, Winter 1998.

¹¹ Malthus, T.R., (1798). "An Essay on the Principle of Population as it affects the Future Improvement of Society", with Remarks on the Speculations of Mr. Godwin, M. Condorcet, and other Writers, http://www.ac.wwu.edu/~stephan/malthus/malthus.2.html (10/01/2006)

blame; it was the system that caused poverty. According to Marx, income inequality was inherent in the wages system as under capitalism, human labour is treated as a mere commodity to be sold to the employer at certain price, the wage. Marx argued, that wages must cover not only the basic subsistence to maintain the body, but also some socially defined wants to keep the worker relatively content and to fuel economic growth¹².

Johansson argues that in an economy under rather full employment, the income distribution is shaped like an onion, with most persons and households within a rather narrow income range. Rather few are below the big bulge and rather few are also in the thin stem in this ideal situation¹³ (Figure 1.).

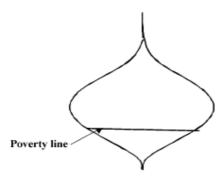


Figure 1. Poverty Line in Income Distribution

Source: Conceptualizing and Measuring Quality of Life for National Policy. (Johansson, 2002)

Orshansky¹⁴ created the first ever poverty-lines for the US in 1965, which defined poverty in absolute terms to measure the "headcount" of persons with equivalence scale adjusted incomes. Orshansky was also aware of the societal differences between the US and other countries struggling with poverty. In her own words:

¹² Peet, R., (1975). "Inequality and Poverty: A Marxist – Geographic Theory", *Annals of the Association of American Geographers*, Vol. 65, No. 4, December 1975, pp. 564 – 571.

¹³ Johansson, S., (2002). "Conceptualizing and Measuring Quality of Life for National Policy", *Social Indicators Research*, Vol. 58, pp. 13 –32.

¹⁴ Orshansky, M., (1965). "Counting the Poor: Another Look at the Poverty Profile", *Social Security Bulletin*, Vol. 28, No. 1, January 1965, pp. 3-29.

"In many parts of the world, the overriding concern for a majority of populace everyday is still 'Can I live?'. For the United States as a society, its no longer whether but how 15."

Thus Orshansky argued that the poor in US would most likely be rather well-off in other parts of the world. However, she also argued that yesterday's luxuries has become today's necessities and as it was not easy to define what was enough, she attempted to identify how much, on an average, is too little.

Sen however, commented that poverty lines or thresholds were inadequate to measure poverty, as they neglected other important features of poverty such as the distribution of income of those in poverty¹⁶. Sen in a later article, also points out that poverty can be an absolute notion in the space of capabilities, though relative in that of commodities or characteristics¹⁷. For example, households incapable of obtaining sufficient food for survival are considered absolutely poor. However, the costs and composition of that food basket may vary considerably between households across different groups, regions and countries. Sen's approach is also known as the capability approach.

While the debate was continuing, several international and inter-governmental institutions were also interested in poverty definition with a view to alleviation. Among these, the World Bank (WB) devoted its 1990 World Development Report solely on poverty. In that report, again the income-based approach to poverty was used. The report differentiated between absolute poverty and relative poverty:

• Absolute poverty: lack of income necessary to satisfy basic food needs
-based on minimum calorie requirements

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¹⁵ Ibid. pg. 5.

¹⁶ Sen, A., (1976). "Poverty: an Ordinal Approach to Measurement," *Econometrica*, Vol. 44, pp. 219 – 231.

¹⁷ Sen, A., (1993). "Capability and Well-being", in M. Nussbaum and A., Sen (eds.), *The Quality of Life*, Clarendon Press, Oxford, pp. 232 – 241.

• Relative poverty: lack of income necessary to satisfy essential non-food needs – such as clothing, energy, shelter – as well as food needs 18.

The WB definition was also a merely economic definition and there is still the debate whether income poverty is a sufficient measure of the poverty of peoples. The lack of agreement on the definition of poverty has important implications for identifying targets and policy development towards poverty reduction, if not alleviation. Most definitions regarding poverty now incorporate issues other than income/consumption levels. However, Foster argued that neither an absolute, nor a relative poverty measurement approach would be sufficient, only using a hybrid approach to set the poverty threshold would be sensitive to changes in general living standards at an agreeable level¹⁹. It is also important to note that there has been a change in the definition and the perception of the WB regarding poverty, which will be further considered during the later parts of this analysis, which was reflected in the 2000 World Development Report with the use of a more comprehensive poverty definition. The poverty definition according to this publication, included opportunity (capability), security and empowerment dimensions and as such had more resemblance to the human development concept²⁰ ²¹.

The United Nations Development Programme (UNDP) introduced the human poverty concept to the poverty studies with the 1997 Human Development Report. Human poverty, according to the UNDP's definition, is the deprivation in basic

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¹⁸ World Bank, (1990). *World Development Report 1990: Poverty*, Oxford University Press, New York.

¹⁹ Foster, J. E., (1998). "What is Poverty and Who are the Poor? Redefinition for the United States in the 1990s, Absolute versus Relative Poverty", *The American Economic Review*, May, Vol. 88, pp. 2.

²⁰ World Bank, (2000). *World Development Report 2000/2001: Attacking Poverty*, Oxford University Press, Washington DC.

²¹ Angelsen, A. and Wunder, S., (2003). "Exploring the Forest – Poverty Link: Key Concepts, Issues and Research Implications", *CIFOR Occasional Paper No:40*, Center for International Forestry Research

human development (another concept introduced by the UNDP) dimensions²². UNDP argued that the measurement of both Human Development (HD) and Human Poverty (HP) together would complement each other to present an accurate picture of the existing situation in a country. UNDP, in every country it works, helps governments gather the data and presents the results in its Annual HD Reports on a country basis. Human poverty index (HPI) measures the vulnerability to death at a relatively early age, the degree of exclusion from the world of reading and communication (illiteracy) and peoples' right to a decent standard of living – as the percentage of people with access to health services and to safe water and the percentage of malnourished children under five-. HPI does not take income into account, as the Human Development Index (HDI) includes GNP and provides the economic picture in the country. The two measures together give an overall view of the countries situation regarding human development.

Human development and human poverty concepts, covering access to resources and services concepts, includes environmental factors and poverty –environment relations as well. As most of the poorest people live in some of the most fragile environments, their lack of access to alternatives or provision of services automatically implies their dependence on natural resources and their vulnerability in the case of any drastic change in the availability of those resources.

While poverty was increasing in the developing countries of the world and becoming an ever-important issue, the world also became aware of the environmental problems arising here and there.

Many development organisations as well as governments place the highest priority on reducing absolute poverty because of the urgency associated with starvation, malnutrition and other afflictions. However, relative poverty is not an

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²² Human Development: Enlarging people's choices, most importantly to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living (UNDP, (1997). *Human Development Report*, Oxford University Press: New York)

exogenous factor in the fight against absolute poverty. The broader context of relative well-being, in which absolute poverty may occur, is critical to the establishment of policies and programmes to reduce absolute poverty. Most advocates of the rights-based approach to poverty utilise a relative definition, arguing that to do otherwise would acknowledge first- and second-class citizens, thus discrimination among the poor and the wealthy²³. This contention is derived from common methodologies used to measure absolute poverty, which involve defining a minimum consumption basket that does not include items considered "essential" by the rest of society.

In the meantime, there are other definitions such as social exclusion and quality of life. Both definitions while including income poverty, also include other concepts such as marginality, vulnerability, empowerment and participation. However, the inclusion of aspects of quality of life or dimensions of social exclusion creates a much more complex poverty concept and one that is much harder to measure, usually criticised for being subjective.

The concept of social exclusion was developed in industrialised countries to describe the process of marginalisation and deprivation that can arise even in rich countries with comprehensive welfare systems in place²⁴. Social exclusion can be referred to as exclusion from the community life due to poverty, a certain kind of sociological deprivation. This type of deprivation cannot be eliminated simply by increasing the income/consumption of the poor and attainment of satisfiers of basic needs such as health and education, as the concepts of poverty emerging from the perspective of sociological deprivations are rooted in underlying structural inequities and inherent disadvantages. They are based on observations that even when resources are flowing into sectors dominated by the poor, the latter may not be able to take full advantage of them because of structural impediments. These constraints hamper access by the poor to "external" assets, such as credit,

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²³ A rights based approach has the objective of ensuring equity and a decent standard of life for all persons as part of basic human rights.

²⁴ Rugerri Laderchi et. al., (2003). op. cit. pp. 250-253

land, infrastructure and common property (i.e. the natural environment), and "internal" assets, such as health, nutrition and education.

The fundamental causal factors lie in power structures and governance issues, as well as in the inequities imbedded in macro-policy frameworks and distributional systems. The human capability concept of poverty focuses on expanding people's opportunities and spans both the physiological and sociological realms of deprivation. Accordingly, poverty is "not merely in the impoverished state in which the person actually lives, but also in the lack of real opportunity—due to social constraints as well as personal circumstances—to lead valuable and valued lives²⁵". Emphasis on empowering the poor, facilitating their participation in society and enabling them to move upward on the socio-economic ladder, are central to the human capability approach to poverty reduction. Social exclusion approach makes social perspective central and is mainly aimed at groups than individuals, thus it effectively opens up a different policy agenda, which focuses on eliminating discrimination. In operational terms, however, the focus on social exclusion, empowerment, participation and enabling creates special challenges. First of all, there is no consensus as to what constitutes an enabling and empowering environment, much less what is "good" or "acceptable": level of participation (i.e., is participation through involvement of larger numbers of people but resulting in less empowerment better or worse than participation of smaller numbers of people that results in greater empowerment?). Secondly, the expansion of the concept of poverty to include other broad areas of concern, such as participation, actually undermines the usefulness of the concept from a policy perspective.

The EU defines social exclusion as "the process through which individuals of groups are wholly or partially excluded from full participation in the society which they live"²⁶. The social exclusion concept now forms a central aspect of

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²⁵ UNDP. (1997), op. cit., pg.16

²⁶ European Foundation for the Improvement of Living and Working Conditions, (1995). *Public Welfare Services and Social Exclusion: the Development of Consumer Oriented Initiatives in the European Union*, Dublin.

the EU social policy, several European Council Decisions (starting with Lisbon Council of March 2000) have adopted strategic goals and political processes aimed at countering the risk of poverty and social exclusion. The social policy agenda of the EU underlines the challenge facing Europe in moving "from an agenda of tackling social exclusion to one which fosters social inclusion and mainstreams it into the heart of all policy making" as the Lisbon Council committed Europe to become "the most competitive and dynamic knowledge-based economy in the world, capable of sustained economic growth with more and better jobs and greater social cohesion"²⁷

2.2 The Environment Concept

Environment can be defined in its simplest terms as basically anything and everything you see and you do not see around you. The Webster's Dictionary defines environment as "the circumstances, objects, or conditions by which one is surrounded" and details the description as "the complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival" Environment is everything that surrounds a particular (or a group of) organism(s) including both the *abiotic* (non-living and not-living) elements such as climate, atmosphere, temperature, moisture, pH, soil and water, and the *biotic* (living) elements such as humans, animals, plants and micro organisms^{29 30}.

While some of these elements such as water, air and soil or land defy the need for explanation, it is important to briefly analyse biodiversity, ecosystem and climate concepts as these concepts will be frequently used in the later parts of the analysis.

²⁷ Lisbon European Council Presidency Conclusions23-24 March 2000, (2000), http://europa.eu.int/ISPO/docs/services/docs/2000/jan-march/doc 00 8 en.html (10/12/2005)

²⁸ Webster's Online Dictionary http://www.m-w.com/dictionary/environment (10/12/2005)

²⁹ Smith, R.L., (1992). "Elements of Ecology Third Edition", Harper-Collins Publishers, NY.

³⁰ Starr, C., and Taggart, R., (1992). "*Biology – The Unity and Diversity of Life*" 6th Edition, Wadsworth Publishing Company Inc., California.

Biodiversity or biological diversity, refers to the variety of life on Earth and the natural patterns it forms, and is commonly used to describe the number, variety and variability of living organisms and the structures that allow them to proliferate³¹. Biodiversity can be more specifically defined as the "variability among living organisms from all sources including terrestrial, marine and other aquatic *inter alia* ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems"³².

The biodiversity of today, is the result of billions of years of evolution, shaped by natural processes and, increasingly, by the influence of humans. Biodiversity forms the web of life of which humans are an integral part and upon which they depend.

Biodiversity is often regarded at three levels, species diversity, genetic diversity and habitat or ecosystem diversity. So far, about 1.7 million species have been identified, mostly small creatures such as insects^{33 34}. Most scientists however, believe that there are about 13.5 million species^{35 36}, though estimates range from 3 to 30 million^{37 38}, including suggestions that there may be 10 million unidentified species in the deep sea alone³⁹.

³¹ Ibid. Chapter 20.

³² de Fontaubert et al., (1996). "Biodiversity in the seas: Implementing the convention on biological diversity in marine and coastal habitats", *IUCN Environmental Policy and Law Paper No. 32. A Marine Conservation and Development Report*.

³³ Parker, S.P., (ed.), (1982). *Synopsis and Classification of Living Organisms*, Mc Graw Hill, New York.

³⁴ Wilson, E.O., (1992). *The diversity of life*, Cambridge, Massachusetts, Harvard University Press.

³⁵ UNEP, Heywood. V.H., (ed.), (1995). *Global Biodiversity Assessment*, Cambridge University Press, Cambridge.

³⁶ Briggs J.C., (1994). "Species diversity: land and sea compared", *Systematic Biology*, Vol. 43, pp. 130–135.

³⁷ Erwin, T.L. (1983). "Beetles and other insects of tropical forest canopies at Manaus, Brazil, sampled by insecticidal fogging" pp. 59–75 in S.L. Sutton, T.C. Whitmore, and A.C. Chadwick, (eds.) *Tropical Rain Forest: Ecology and Management*, Blackwell, Edinburgh.

Ecosystem includes the biotic (living) components of environment and explicitly includes the abiotic (not and non-living) components (e.g. soil parent material and climate), which includes a wide variety of habitats, communities and ecological processes⁴⁰. Ecosystems provide a variety of services to humans, starting from the provision of basic food needs to shelter and act as support systems towards disturbances and in their natural state, ecological processes such as energy flows and water cycles are conserved. There is no global consensus on the definition or the classification of ecosystems, as the boundaries of communities (associations of species) and ecosystems are more elusive. Since the ecosystem concept is dynamic and thus variable, it can be applied at different scales, though for management purposes it is generally used to group broadly similar assemblies of communities, such as temperate rainforests or coral reefs.

Climate refers "to the prevailing weather conditions, including temperature, humidity, wind speed, cloud cover and rainfall"⁴¹. As it affects all land, air and water, climate has profound implications regarding the well being of the environment and its constituents.

Therefore, any issue relating to the rural or the urban areas, relating to humans or other species, to air, to water, to land has an environmental context. Poverty is particularly related to environment, as most of the very poor in the world live in the most fragile ecosystems. Most of the times, the poor have no other resource than the natural resources available to them, and are frequently under great risk should there be a sudden change in that availability. The poor are seldom able to

³⁸ May, R.M. (1992). "How many species inhabit the Earth?", *Scientific American*, October1992, pp.18-24.

³⁹ Grassle, J.F. and Maciolek, N.J., (1992). "Deep-sea species richness: regional and local diversity estimates from quantitative bottom samples". *American Naturalist*, Vol. 139, pp. 313-341

⁴⁰ Starr and Taggart, (1992). Chapter 20.

⁴¹ Starr and Taggart, (1992). op. cit. pg. 848.

secure safe homes, even when they can, these are usually located in either polluted or degraded environmental conditions⁴².

2.3 Interactions Between Poverty and Environment

2.3.1 Poverty – Environment Nexus Concept

The degree of environmental degradation due to the industrial revolution and its potential adverse effects on humanity became apparent in the late 1960's. Unfortunately, it took a couple of disasters for the world to realise that the environment was being degraded far beyond its capability to restore itself. Technological improvements helped in making business in a cheaper and quicker way, but disregarded the nature's replenishment capacity. As a response to emerging environmental problems the United Nations (UN) Conference on Human Environment (UNCHE), hereinafter the Stockholm Conference, was held in 1972. The Stockholm Conference took the leading role in defining a new model for development taking environmental factors into consideration and was the first of its kind and a milestone in international environmental discourse. The Stockholm Conference aimed at devising a new mechanism "having considered the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment"⁴³. The results of the conference were the creation of an Action Plan for Environmental Policy, an Environment Fund, a declaration of twenty-six principles on Human Environment and most importantly, the establishment of the United Nations Environment Programme (UNEP). During the conference, the Indian Prime Minister Indra Gandhi voiced the concerns of the developing countries on the relationship between poverty and environment for the first time in the international arena with her famous words "poverty is the worst form of pollution". The Stockholm Declaration although not referring to poverty as such, accepts that "economic and social development is essential for ensuring a

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⁴² Angelsen, A., (1997). "The Poverty-Environment Thesis: Was Bruthland Wrong?", Forum for Development Studies, Norway.

⁴³ United Nations Stockholm Declaration, (1972). http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=97&ArticleID=1503 (10/12/2005)

favourable living and working environment for man and for creating conditions on earth that are necessary for the improvement of the quality of life" however, underlines that "the natural resources of the earth...must be safeguarded for the benefit of present and future generations through careful planning or management. 44"

The approach of Ms. Gandhi's and the international consensus reached with the Stockholm Conference was reflected in the 1987 report of the UN World Environment and Development Commission (WCED)⁴⁵, hereinafter the Brundtland Report, titled "Our Common Future", describing the relationship as:

"Many parts of the world are caught in a vicious downwards spiral: Poor people are forced to overuse environmental resources to survive from day to day, and their impoverishment of their environment further impoverishes them, making their survival ever more difficult and uncertain⁴⁶"

The Brundtland Report marked the UN Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, hereinafter the Rio Conference, with the sustainable development concept it brought⁴⁷. The report described sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs". Actually, the predecessor Stockholm Conference and the Stockholm Declaration had a similar approach with respect to conservation of resources for the use of future generations. An alternative definition for sustainable development is "improving the quality of human life while living within the carrying capacity of

⁴⁵ Also known as the Brundtland Commission.

⁴⁴ Ibid. Principles 2 and 8.

⁴⁶ Brundthland, G., (ed.), (1987). *Our Common Future: The World Commission on Environment and Development*, Oxford University Press, Oxford.

⁴⁷ Also known as Rio Summit or the Earth Summit.

supporting ecosystems"⁴⁸, which can be explained as the kind of development that takes the environment's carrying capacity into consideration thus effectively limited with the restoring capacity of the environment for the natural resource to be replenished.

The Rio Conference has been a turning point for the environment, both due to the content and the participation level, around 12,000 delegates from 178 countries participated the conference. In the twenty years following the Stockholm Conference, it was obvious that the decisions were not followed, mostly due to the Cold War. At the Rio Conference, the conflict was between the developed countries, called the "North" (North America, Europe and Japan) and the developing countries named as the "South" (Latin America, Africa and some Asian Countries). The North countries were blaming the developing countries for their heavy dependence on natural resources, therefore depleting them, when on the contrary the South countries were blaming the industrialised countries for the environmental problems and defending themselves on the grounds of economical constraints. The Rio Conference did not solve the conflict, but it paved the path to the solution as the world leaders agreed on a comprehensive strategy for sustainable development. The main outcomes of the Rio Conference is the adoption of two international environmental conventions, namely the Convention on Biodiversity (CBD) and United Nations Framework Convention on Climate Change (UNFCCC), the Rio Declaration and the Agenda 21, possibly the most extensive "soft law" instrument.

The debate in the 1970s suggests that economic growth is necessary to break the poverty-environment nexus. The WB for instance, has frequently used the "winwin" slogan: that the policies promoting economic growth would also be beneficial to the environment, partly because economic growth is supposed to reduce poverty and therefore enhance environmental conservation. In their 1992 World Development Report: Development and Environment, the WB explained the relationship between poverty and environment as:

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⁴⁸ IUCN/UNEP/WWF, (1991). Caring for the Earth: A Strategy for Sustainable Living, Gland.

"Strong environmental policies complement and reinforce development. It is often the poorest who suffer most from the consequences of pollution and environmental degradation. Unlike the rich poor cannot afford to protect themselves from contaminated water; in cities they are more likely to spend much of their time on the streets, breathing polluted air; in the rural areas they are more likely to cook on open fires of wood and dung, inhaling dangerous fumes, their lands more likely to suffer from soil erosion. The poor may also draw a large part of their livelihood from unmarketed environmental resources: common grazing lands, for example, or forests where food, fuel, and building materials have traditionally been gathered. The loss of such resources may particularly harm the poorest. Sound environmental policies are thus likely to be powerfully redistributive. 49"

Into mid- to late- 1990s, poverty-environment interactions have become a major concern of international development agencies and policy makers. The interest over poverty-environment relationships emerged from two different directions. On one side were those concerned with poverty studies, increasingly realising the importance of the state of the environment in determining the extent of poverty. On the other side were the environmentalists, who started to realise that pure environmental conservation attempts, more often than not, resulted in alienation of the local people and causing more damage than it repaired⁵⁰ ⁵¹. Environmentalists increasingly started to be involved in so-called "Integrated Conservation and Development Projects" as opposed to pure conservation projects, attempting to both conserve the environment and provide alternative

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⁴⁹ World Bank, (1992). *World Development Report 1992 Development and the Environment*, Washington D.C., pg.2

⁵⁰ Carwardine, M., (1990). *The WWF Environment Handbook*, Macdonald and Co., London.

⁵¹ Adams, W.M., (1990). *Green Development: Environment and Sustainability in the Third World*, Routledge, London.

income generation opportunities to the local communities, thereby reducing the dependency and pressure over the environmental resources⁵² 53.

Environmental degradation and poverty undoubtedly reinforce each other, making the poor both the victim and actors in environmental degradation. Angelsen argued that poverty reduction and environmental conservation were two of the main global challenges and the question is not whether they are linked or not, but how. Angelsen claimed while it is clear that the poor, due to their heavy reliance on environmental resources, often become victims of environmental destruction, the opposite linkage was far less obvious and its extent is open to debate.

Three main issues can be considered in analysing the poverty-environment nexus approach. First of all, whether low income actually causes environmental destruction or conversely, whether a higher income would eliminate or at least reduce this problem should be questioned. Building on the rather simplistic hypothesis that "environment comes after breakfast", whether increasing income levels of the poor contribute to environmental conservation⁵⁴. The answer to that question lies in the analysis of whether economic growth, first and foremost, is good for the poor or not?⁵⁵ How does it really affect the incomes of the poor? It is clear that growth in Gross Domestic Product (GDP) per capita will result in improvement of the overall income levels within the population, however, what is more important is the distribution of this "extra" income within the population.

No matter how the measurement of poverty initially has been conducted, the change can be measured and compared, although, one has to caution, accuracy maybe an important consideration, as all poverty measurements include a certain

⁵² Fisher, R.J., (1995). *Collaborative Management of Forests for Conservation and Development*, Gland, Switzerland, WWF International and IUCN – The World Conservation Union.

⁵³ Angelsen, (1997). pg. 136

⁵⁴ Ibid pg. 136

⁵⁵ Foster, J.E. and Szekely, M., (2001). "Is Economic Growth Good for the Poor? Tracking Low Incomes Using General Means", *UNU/WIDER Development Conference on Growth and Poverty*, Helsinki, May 2001.

degree of arbitrariness irrespective of the methodology used. Empirical evidence on the share of benefits of economic growth by the poor started to accumulate since 1970s. The first studies on the issue verified the Kuznets hypothesis that inequality (not poverty) increases during the initial phases of development (or growth) and declines after a turning point. Therefore growth, at the beginning would cause a decline in the share of economic benefits to the poor, but this gradually changes in the long run^{56 57}. However, these findings were repeatedly challenged; for instance by Anand and Kanbur with the argument that if the specification is improved, the inverted "U" shaped relationship between inequality and growth suggested by Kuznets vanishes⁵⁸. Furthermore, others argued that there is no systematic relationship between the Gini coefficient⁵⁹ and GDP per capita growth^{60 61 62 63}. The concerns about inequality in general has since left the centre of attention to whether the "poor" specifically (rather than all sectors of society) share the benefits proportionally (pro-poor). Again, two opposing views are observed, while it is argued that growth in average income leads almost to a

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⁵⁶ Ahluwalia, M., (1976). "Inequality, Poverty and Development", *Journal of Development Economics*, Vol. 3, Issue 4, pp. 307 – 342.

⁵⁷ Ahluwalia M., Carter, N., and Chenery, H., (1979). "Growth and Poverty in Developing Countries", *Journal of Development Economics*, Vol. 6, Issue 3, pp. 299 – 341

⁵⁸ Anand, S. and Kanbur, R., (1993). "The Kuznets Process and the Inequality-Development Relationship", *Journal of Development Economics*, Vol. 40, Issue 1, pp. 25 – 52.

⁵⁹ A measure of the extent to which actual income distribution in a country differs from a hypothetical uniform distribution, goes from 0, for absolute equality, with each individual or household receiving an identical share of income, to 100, which indicates that one person or household receives all the income (Deininger and Squire, (1996)).

⁶⁰ Bruno, M., Ravallion, M. and Squire, L., (1998). "Equity and Growth in Developing Countries: Old and New Perspectives on the Policy Issues", in *Income Distribution and High Quality Growth*, V., Tanzi, and K.Y., Chu (eds.), MIT Press, Cambridge, Mass.

⁶¹ Deininger, K. and Squire, L., (1996). "Measuring Inequality: A New Database", *World Bank Economic Review*, Vol. 10, No. 3, pp. 565 – 591.

⁶² Li., H., Squire, L., and Zou, F., (1998). "Explaining International and Intertemporal Variations in Income Inequality", *The Economic Journal*, Vol. 108, No. 446, pp. 26-43.

⁶³ Ravallion., M. and Chen, S., (1997). "What Can New Survey Data Tell Us About Recent Changes in Distribution and Poverty?", *World Bank Economic Review*, Vol.11, No.2, pp. 357-82.

one-to-one increase in the incomes of the poor, there are also claims that the gains of the poor are considerably smaller⁶⁴ 65 66 67.

Despite the fundamental difference in the findings of the two sides to the debate, there is a growing consensus that:

- For most cases, macroeconomic growth raises the income of the poor and reduces the people below the poverty line. Growth "trickles down" in the medium and long run and at an aggregated level;
- In a small number of deviating cases, little or no poverty reduction is observed with growth due to a skewed initial asset distribution and or a bad quality economic growth. This development pattern is characterised by low labour intensity, low human capital accumulation, rural neglect and high corruption ⁶⁸ ⁶⁹.

Low levels of income forces users to increase the utilisation of resources for survival, which in turn diminishes the natural resource base. The lower resource base in turn, reduces the provision of products or services, further aggravating poverty. It is further argued that the poor have a relatively short time horizon and higher risk-aversion and a propensity to use implicit, higher discount rates. While some argue that poverty results in short sightedness in production and consumption decisions and precludes longer term investments in preservation and

⁶⁴ Roemer, M., Gugerty, M., (1997). "Does Economic Growth Reduce Poverty?" *Consulting Assistance for Economic Reform (CAER) II Discussion Paper No. 4*, Harvard Institute for International Development (HIID), Harvard.

⁶⁵ Gallup, JL., Radelet, S., Warner, A., (1999). "Economic Growth and the Income of the Poor", *CAER II Discussion Paper No. 36*, HIID, Harvard.

⁶⁶ Dollar, D. and Kraay, A., (2000). "Growth is Good for the Poor", Development Research Group, World Bank.

⁶⁷ Timmer, P., (1997). "How well do the Poor Connect to the Growth Process", *CAER II Discussion Paper* No. 17, HIID, Harvard.

⁶⁸ Fields, (2001), op. cit. pg. 99.

⁶⁹ Ravallion, M., (2001). "Growth, Inequality and Poverty: Looking Beyond Averages", *Working Paper No. 2558*, World Bank, Washington DC.

accumulation of natural capital⁷⁰ ⁷¹. The poor with their limited economic options and low saving levels, tend to rely more on those resources causing them to deplete and destruction of their immediate environment and environmental resources. On the other hand, the opposite can also be argued that the locally designed and governed resource management schemes provide the resistance for unforeseeable risk and external shocks and in the long run facilitate sustainable use⁷² ⁷³ ⁷⁴ ⁷⁵ ⁷⁶.

Ostrom, in particular supports this idea by her observation that neither the state, nor the market has been as successful in enabling individuals to sustain long-term, productive use of natural resource systems in many locations. Empirical evidence presented by Ostrom shows that usually communities have devised unique resource management systems, suited to their own needs of the local conditions and maintained sustainability at much more effective levels compared to the state and the market driven resource-management systems.

Holden as well as Pearce and Warford argued, "high discount rates are one cause of environmental degradation because they encourage individuals to opt for shortterm measures that satisfy immediate needs or wants and to ignore more

⁷⁰ Holden et.al, (1996). "Poverty and Myopia. A Study of Time Preferences among Rural Poor" unpublished manuscript, Agricultural University of Norway, cited in Angelsen A., (1997).

⁷¹ Prakash, S., (1997). "Poverty and Environment Linkages in Mountains and Uplands: Reflections on the "Poverty Trap" thesis", *CREED Working Paper Series No. 12*, IIED, London. http://www.mtnforum.org/resources/library/praks97a.htm (10/11/2005)

⁷² Ostrom, E., (1990). *Governing the Commons: the Evolution of Institutions for Collective Actions*, Cambridge University Press, New York.

⁷³ Rhoades, R., (1988). "Thinking Like a Mountain", *Newsletter of the Information Centre for Low External Input Agriculture*, Vol. 4, Issue 1, pp. 3 –5.

⁷⁴ Prakash, (1997). op. cit.

⁷⁵ Jodha, N.S., (1986). "Common Property Resources and Rural Poor in Dry Regions of India", *Economic and Political Weekly*, Vol. 21, No. 27, pp. 1169 – 1181.

⁷⁶ Bromley, D., (1992). *Making the Commons Work: Theory, Practice and Policy*, Institute for Contemporary Studies Press, San Francisco.

environmentally appropriate practices"⁷⁷ ⁷⁸. With focus on short-term survival, the poor often are prevented from investing in physical and natural capital, even in human-capital such as schooling of children. Also, the poor, being "un-bankable" often have to borrow from informal, high-interest rate and even illegal markets.

Even with the trickling effect, with the structural problems, it is not easy for the poor to have access to more resources with economic growth. Also, there still is the concern regarding whether increased income really relieves environment from the pressure⁷⁹. While its easy to observe poverty would increase pressure on local resources, looking from a more global point of view, it is harder to support that hypothesis when it comes to the stress put on national and global environment by high income earners such as greenhouse gas emissions, industrial wastes etc. Easterly attempted to answer the question by using a large cross-national data set and identified several positive relationships between per capita income and emission of some pollutants and wastepaper production⁸⁰.

Moreover, another important question would be whether the relative importance of poverty-driven degradation is really all that high, compared to degradation resulting from exploitation of resources by the rich groups and misguided government policies⁸¹. High demand for rare commodities by the well-off and investment incentives disregarding the environmental concerns, has proven to be far more damaging than the damages inflicted on natural resources by the local communities. Governments, through policy failures, actions or inactions that result in environmental degradation or pollution can have very severe impacts on

⁷⁷ Holden, S., Bekele S., and Mette W, (1996). "Poverty, Market Imperfections, and Time Preferences: of Relevance for Environmental Policy?", *Discussion paper #D-26/1996*, Department of Economics and Social Sciences, Agricultural University of Norway.

⁷⁸ Pearce, D.W. and Warford, J.J., (1993). *World without End – Economics, Environment and Sustainable Development*, Oxford University Press, New York.

⁷⁹ Angelsen (1997). op. cit. 137

⁸⁰ Easterly, W., (1997). "Life During Growth: A Compendium of Political, Social and Environmental Indicators of What Gets Better and What Gets Worse from Low to High Income", *Working Paper No. 17*, Policy Research Department, World Bank, Washington DC.

⁸¹ Angelsen (1997). op. cit., pg.138

the poor. Specific examples may range from promotion of environmentally destructive road developments, encouraging activities that have tremendous adverse impacts on the environment such as livestock development or clearing of forests to promoting tax-exemptions to large-scale farming and ineffective mechanisms to prevent clearing and conversion of land to pastures or settlement areas 82 83 84.

Last but not least, it can be argued that the coexistence of poverty and environmental degradation can be attributed to similar root causes: lack of environmental entitlements⁸⁵. Insecure or non-existing rights to natural resources may create both a situation of poverty and give small incentives for sound resource management.

Property rights play a fundamental role in the poverty-environment nexus. Incomplete property rights, compounded by the lack of public investment and poverty reduce the individual's incentive for and capacity to be engaged in local environmental management, both in rural and in urban settings. Empirical evidence has shown that insecure property rights cause a low-level of ownership and willingness to take part in management of local environmental resources, thus in a higher degree of environmental degradation and the contrary have proven to be effective ands sustainable ^{86 87 88 89 90}.

⁸² Mahar, D.J., (1989). "Government Policies and Deforestation in Brazil's Amazon Region", World Bank, Washington DC.

⁸³ Binswanger, H., (1989). "Brazilian Policies That Encourage Deforestation in the Amazon", *Working Paper* No.16, Environment Department, World Bank, Washington DC.

⁸⁴ Myers, N. and Kent, J., (1995). *Environmental Exodus—An Emergent Crisis in the Global Arena*, Climate Institute, Washington DC.

⁸⁵ Angelsen (1997). op. cit., pg.139

⁸⁶ Hoy, M. and Jimenez, E., (1996). "The Impact on the Urban Environment of Incomplete Property Rights", *Working paper No.14*, Policy Research Development, World Bank, Washington D.C.

⁸⁷ Ostrom, E., et. al., (1999). "Revisiting the Commons: Local Lessons, Global Challenges", *Science*, Vol. 284, Issue 5412, pp. 278 – 282.

Summarising the debate, it is possible to conclude that the poverty-environment nexus theory, while building on the undisputable fact that the poor are both agents and victims of environmental degradation, fails to include other factors such as structural problems of the economy, government policies damaging the environment and lack of or insecurity of environmental entitlements.

2.3.2 Poverty – Environment Two-way Interaction

The poor often live in vulnerable environments without access to technology and information. The damage inflicted on nature by the people, backfires in the form of less and less resource availability in the medium to long run, from which the natural resource dependent poor cannot easily escape, as typically they are without the means to move elsewhere.

The interactions between poverty and environment is analysed further in the context of this study, in the context of land degradation, biodiversity loss, pollution and climate change. While there are other interactions such as urbanisation, infrastructure development and health implications, these issues will not be analysed individually.

2.3.2.1 Land Degradation

One of the major environmental problems is land degradation. Land degradation, which can simply be defined as the loss of actual land⁹¹ or the characteristics of land, or more comprehensively, as reduction or loss, in arid, semi-arid and dry

⁸⁸ Shively, G., (2001). "Poverty, Consumption Risk and Soil Conservation", *Journal of Development Economics*, Vol. 65, pp. 267 – 290.

⁸⁹ Shepherd, G., (1991). "The Communal Management of Forests in the Semi-arid and Sub-humid Regions of Africa", *Development Policy Review*, Vol. 9, pp. 151- 176.

⁹⁰ Quisumbing et. al., (2001). "Women's Land Rights in the Transition to Invidualised Ownership" Implications for Tree-Resource Management in West Ghana", *Economic Development and Cultural Change*, Vol. 50, Issue 1, pp. 157 – 181.

⁹¹ The terrestrial bio-productive system that comprises soil, vegetation, other biota, and the ecological and hydrological processes that operate within the system (UNCCD, 1996)

sub-humid areas, of the biological or economic productivity and complexity of rainfed cropland, irrigated cropland, or range, pasture, forest and woodlands. Land degradation can take many forms, but most commonly it can be observed as soil erosion, salinisation, waterlogging, vegetation depletion, fertility loss, soil structure change, and pollution of soil. Land degradation may result from land uses or from a process or combination of processes, including those arising from human activities and habitation patterns, such as: erosion caused by wind and/or water; deterioration of the physical, chemical and biological or economic properties of the soil; and long-term loss of natural vegetation, such as deforestation⁹². Although, there can also be natural reasons behind land degradation, mostly the focus is on the physical or biological effects with land-use methods seen as the ultimate causes of degradation, such as the intervention of humans via dam constructions or mismanagement of the land resources.

The lack of access to technology and information such as sustainable agricultural practices are among the major reasons for land degradation issues, which are commonly observed around some of the poorest rural districts. Improper irrigation, unsustainable wood harvesting as well as overgrazing results in land degradation and erosion, which causes loss of fertile land and aggravating poverty. 30 % of the worlds irrigated lands, 40% of rainfed agricultural lands and 70% of rangelands are affected by some level of degradation⁹³. While it is possible to restore degraded land, land restoration and/or improvement measures often require extensive technical solutions or very large quantities of water.

As all terrestrial ecosystems are literally based on the land, degraded soil or land means lower fertility, loss of areas and/or reduced or altered biological diversity. Soil/land is considered as a semi-renewable resource. Although one could argue that topsoil restores itself, this is only at an extremely slow rate. In general, the rate at which topsoil is "degraded" or eroded through cultivation is accepted to be

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⁹² United Nations Convention to Combat Desertification Convention Text, (1996). http://www.unccd.int/ (12/12/2005)

⁹³ Dixon et. al., (1998). "Protecting our Planet – Securing our Future", Joint Publication of UNEPNASA-World Bank.

generally faster than the rate at which it can regenerate. Therefore, soil suitable for agriculture, or arable land, is usually treated as a potentially depletable resource. It is generally assumed that most farming practices will result in rates of erosion that exceed the "natural" or "background" rate of soil erosion that would occur if no cultivation took place. From an economic perspective, conservation of arable land implies "saving" soil for future use. This may then appear paradoxical, as the poor, with land being among their very few assets and a very important one, are not trying to protect it but are destroying it due to overuse. However, it is also possible to argue that there may be apparent (and higher) immediate gains to the poor by overexploiting the land, than the future gain of conserving the land, thus they may be suffering from short sightedness in production and consumption decisions⁹⁴.

The close relationship of poverty and land is evident from the prevalence of poverty in rural areas. Countries that are classified as low income have much higher shares of agriculture in GDP and even higher shares of rural labour force as compared to the industrial market economies⁹⁵. Typically, the share of agriculture in GDP in the low-income countries is reported to be about 30 percent and the proportion of total labour force in agriculture was about 68 percent, while the corresponding figures for the industrial market economies were 6 and 2 percent, respectively⁹⁶. The same can be said with recent data, as FAO State of Agriculture (SOFA) report claims that the "Global Workforce Employed in Agriculture, Fisheries, and Forestry", is 44% (world average), while in the developed countries this average drops down to 7% and the developing countries' average is 54% according to 2003-2004 data⁹⁷. These findings indicate a steady

⁹⁴ Barbier, E.B., (1995). "The Economics of Soil Erosion, Theory, Methodology and Examples", Fifth Biannual Workshop on Economy and Environment in Southeast Asia. http://www.idrc.ca/uploads/user-S/10536145400ACF2B4.pdf (13/11/2005).

⁹⁵ World Bank, (1990). op. cit

⁹⁶ World Bank, (1997). "Expanding the Measure of Wealth: Indicators of Environmentally Sustainable Development", *Environmentally Sustainable Development Studies and Monograph Series No. 7*, Washington DC.

⁹⁷ Food and Agriculture Organization of the United Nations (FAO), (2004). *The State of Food and Agriculture 2003-2004: Agricultural Biotechnology—Meeting the Needs of the Poor?*, FAO,

decrease in the percent of rural population worldwide (annually, and with "development") as the 2005 SOFA report shows all above values have decreased by 1% even with roughly 1% increase in overall world population, around 2% increase in the rural population and an approximately 1.5% increase in the total economically active population in agriculture⁹⁸.

Reduced soil fertility or a total loss of the affected areas also endangers food security and may force people to migrate. These, coupled with the recent trend of decreasing rural population and rural workforce, are all factors contributing to poverty⁹⁹. Any form of environmental degradation in the place of residence which affects the productivity of the land through reduced soil fertility or increased soil erosion, will tend to reduce incomes (making the place of origin a less attractive place to live) and stimulate out-migration. Some causal factors are at the level of the farm (e.g., improper practices), while others affect the whole community as a result of either natural forces (e.g., drought) or collective human decisions (e.g., depletion of the available water supply through overuse). In extreme cases, such as drought or natural disaster, the role of environmental factors in impelling out-migration becomes dramatically evident, and those forced to move become, "environmental refugees" ¹⁰⁰.

This type of poverty-induced migration can be from rural to rural, urban to rural or urban to urban, but in most developing countries, the most common migration pattern is from rural to urban. While the movement of peoples from other rural areas or to urban areas are likely to relieve some of the pressure on the place of origin to an extent, all migratory movements have an adverse environmental

Rome. http://www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESA/en/pubs_sofa.htm (19/12/2005).

⁹⁸ Food and Agriculture Organization of the United Nations (FAO), (2005). *The State of Food and Agriculture 2005: Agricultural trade and poverty: Can trade work for the poor?*, FAO, Rome. http://www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESA/en/pubs-sofa.htm (19/12/2005).

⁹⁹ Bridges EM and Oldeman, L.R., (1999). "Global assessment of human-induced land degradation", *Arid Soil Research and Rehabilitation*, Vol. 13, pp. 319-325.

¹⁰⁰ Bilsborrow, R.E., (1992). "Rural Poverty, Migration and the Environment in Developing Countries: Three Case Studies", World Bank Policy Research Papers, Washington DC.

affects on the destination. Just as well movement from the rural to urban, decreases the rural population drastically, which may in turn, create serious labour shortages and loss of scarce human capital, declining total and per capita output. Where labour required to maintain the productive character of the land is lost, environmental implications may also be negative¹⁰¹.

The urban population in the world has increased drastically since 1950s. The UN Population Division foresees this increase to continue with a lower rate in the near future (Figures 2 and 3), compared to the rates between 1950 -1975¹⁰².

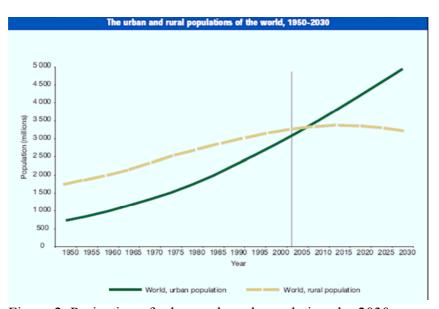


Figure 2. Projection of urban and rural populations by 2030 Source: World Urbanization Prospects: The 2003 Revision. (UN Population Division, 2004)

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¹⁰¹ Ibid. pg. 4

¹⁰² UN Population Division, (2004). World Urbanization Prospects: The 2003 Revision, UN, New York.

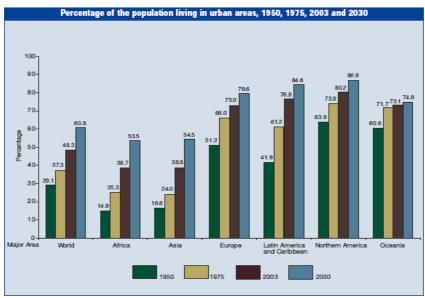


Figure 3. Increase of urban population by regions Source: World Urbanization Prospects: The 2003 Revision. (UN Population Division, 2004)

Much of the urban poverty begins as rural poverty, exported from the countryside through rural-to-urban migration. Aiming for a better life with more and diverse opportunities, the rural poor switches places, but are mostly unable to change their precarious conditions. Urban to rural migration creates big cities that usually have depleting environmental resources and huge peri-urban slums. The challenges the poor face are mostly due to unplanned and sometimes illegal settlements, with little or no infrastructure and high levels of pollution, resulting in elevated levels of poverty.

2.3.2.2 Biodiversity / Habitat Loss

Another one of the main problems that poverty causes and in turn is affected by is biodiversity loss. This can either be direct loss of biodiversity, such as overexploitation of forest resources, or over-harvesting of a fish species or over-collection of plants from nature, or via indirect loss caused by destruction of habitats that the species depend on, such as clearing of forests for fuel wood or draining of wetlands.

Biodiversity loss is interrelated with other global environmental problems such as pollution, climate change, habitat fragmentation, illegal trade of endangered

animals. The loss of biological diversity may take many forms, as it entails the decline in the diversity of ecosystems, species and genes, but at its most fundamental and irreversible it involves the extinction of species ¹⁰³. Extinction of species is largely unavoidable and natural, but it is a process that has been severely sped up by humans. While it is not easy to quantify rates of species extinction, both at present and historically, is difficult and predicting future rates with precision is impossible. Documenting definite species extinctions is only realistic under a relatively limited set of circumstances, where a described species is readily visible and has a well-defined range, which can be surveyed repeatedly, which is not very common, except in certain cases such as extinction of species on small islands. Therefore, most quoted global extinction rates are derived from extrapolations of measured and predicted rates of habitat loss, and estimates of species richness in different habitats; rather than being derived from observed extinctions. However, it is believed that the extinctions of today and the future will be in highly elevated levels¹⁰⁴.

According to the Global Biodiversity Assessment, species have been becoming extinct since 1600s at 50-100 times the average estimated natural rate, while the extinction rate is expected to rise to between 1,000 and 10,000 times if the trend of biodiversity loss is not reversed. By examining fossil records and ecosystem destruction, scientists estimate that as many as 137 species disappear from the earth each day, which adds up to an astounding 50,000 species disappearing every year 105 106. Global environment outlook report, concluded that over 11,000 species (including almost a quarter of all mammals) face extinction within 30 years 107.

 $^{^{103}}$ Starr and Taggart (1992). op. cit. Chps. 20-21.

¹⁰⁴ Chivian, E. (ed.), (2002), *Biodiversity, Its Importance to Human Health: Interim Executive Summary*, Harvard Medical School.

¹⁰⁵ UNEP, (1995).

¹⁰⁶ Wilson, (1992). op. cit. Chapter 4.

¹⁰⁷ UNEP, (2002). Global Environment Outlook 2002, Earthscan Publications, London, pp. 120 – 149

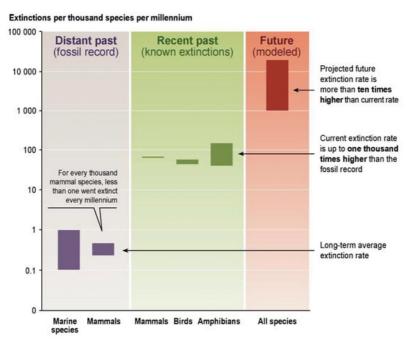


Figure 4. Extinctions past and future¹⁰⁸ Source: Millennium Ecosystem Assessment – Ecosystems and Human Wellbeing. (World Resources Institute, 2005)

Extinction of species, a seemingly unimportant concern, regarding that the estimates of species diversity go as high as 100 million, is a major worry among scientists. Humanity derives all of food; most of its medicines; a major proportion of its building materials, clothing, chemical feed stocks; and other useful products from the living world. In addition, the communities and ecosystems that it comprises protect our watersheds, stabilises the land, determine the climate, provide the insects that pollinate the crops¹⁰⁹ ¹¹⁰. The loss of species, particularly the local varieties have implications for the health of ecosystems, although as

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Millennium Ecosystem Assessment, a four-year, international effort to document the contribution of ecosystems to human well-being, assay the current state of ecosystem health, and offer a prognosis for how the capacity of ecosystems to support human needs may change under different management scenarios. (World Resources Institute, (2005). Millennium Ecosystem Assessment – Ecosystems and Human Well-being: Biodiversity Synthesis, Island Press, Washington DC. http://www.millenniumassessment.org/en/Products.aspx? (19/12/2005)

¹⁰⁹ Baskin, Y., (1977). *The Work of Nature: How the Diversity of Life Sustains Us*, Island Press, Washington DC.

¹¹⁰ Daily, G.C. (ed.) (1997). *Nature's Services: Societal Dependence on Natural Ecosystems*, Island Press, Washington DC., pp. 1-10 and pp. 365 – 374.

individual species or varieties, they may not appear to be "useful" or their loss "important" to humanity. Norton and Ehrenfeld argue against the selective conservation approach (conserving the "important" species – prioritising conservation with a cost-benefit view¹¹¹) as species cannot be measured in terms of value, particularly value in economic terms¹¹² 113.

Ecosystems provide several "services" that support livelihoods, such as providing the natural habitat for plants, animals, wild pollinators essential for food crops, watershed protection and hydrological stability, maintenance of soil fertility, cycling of water and nutrients and breakdown of waste and pollutants. These services are vital for the poor, especially when they are living in more marginal environments with limited access to technology and other inputs. Healthy ecosystems are highly resilient to human and natural disturbances, however, loss of biodiversity can easily cause an ecosystem loose this defence mechanism and cause deprivation of the services provided, the variety in ecosystems is vital for the poor in providing livelihood options 114 115.

2.3.2.3 Pollution

Air, water and soil pollution are major threats both to the health of ecosystems and to people living around the areas, in rural as well as urban settings. The poor

¹¹¹ Randall, A., (1988). "What mainstream economists have to say about the value of biodiversity" in. E. O., Wilson (ed.) *Biodiversity*, National Academy Press, Washington DC.

¹¹² Norton, B. G. (1994). "On what we should save: the role of cultures in determining conservation targets", in P. Forey et al. (eds.), (1994). *Systematics and conservation evaluation*, Special volume of the Systematics Association, Oxford University Press, Oxford.

¹¹³ Ehrenfeld, D. (1988). "Why put a value on biodiversity?", in E.O., Wilson (ed.) *Biodiversity*, National Academy Press, Washington DC..

¹¹⁴ Koziell, I. and Saunders, J., (2001). "Living Off Biodiversity: Exploring Livelihoods and Biodiversity, Issues in Natural Resource Management", IIED, London.

¹¹⁵ Folke et. al., (2002). "Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations", *Ambio* 31, No. 5, pp. 437-40.

are most affected by traditional environmental hazards, such as air pollution, the lack of safe water and sanitation opportunities¹¹⁶.

Most of the times, it is not the poor that cause the pollution as they rarely can create a dangerous level of pollution, for instance solid waste, dangerous chemicals or very high levels of CO₂ emissions, they are more on the suffering side. For instance, re-iterating the findings of Easterly, there is a strong correlation between per capita income and emissions of some pollutants¹¹⁷. The main problem is that the poor cannot readily change places or eliminate the pollution by themselves, there is often need for external help, be it financial or technical.

Inadequate access to safe water is an important concern in developing countries. Water-related diseases kill around 3 million people a year, most of whom are children under the age of five¹¹⁸. The poor seldom have access to sewage systems, proper sanitation and waste management mechanisms, and this is true for both rural and urban environments. While there are the obvious health implications, the environment also takes its toll from the effects of pollution. Nutrient-loaded streams and lakes may suffer from euthrophication, heavy metal or chemical waste accumulation in water, which has detrimental if not lethal effects on people as well as other forms of domestic and wild life.

The effects of climate change on water supply will be analysed in the next section, however, it is important to note here that any major change in the quantity and the quality of water resources would become a major environmental problem threatening the well being of the poor. Decrease in the quality and the quantity of

¹¹⁶ Lvovsky, K., (2001), "Health and Environment", Environment Strategy Paper No. 1, World Bank, Washington DC. http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000094946_0205040403117 (13/12/2005)

¹¹⁷ Easterly (1997), op. cit. pp. 14-15.

¹¹⁸ Murray C.J.L. and Lopez, A.D., (1996), "Lessons from the Global Burden of Disease Study", *Science*. November 1996: Vol. 274, No. 5288, pp. 740 – 743.

drinking water levels or water for irrigation would have profound effects on health of humans and the ecosystems as well as on food security.

Air pollution and its relationship to poverty and environment can be considered under two different headings: indoor air pollution and outdoor air pollution. While in urban environments, it is more common to observe outdoor air pollution caused by industrial and domestic sources as well as car exhaust fumes, in rural environments, poor people are more often subject to indoor air pollution.

Indoor air pollution is mainly caused by the use of traditional biomass fuels (wood, dung, crop residues etc.) for cooking and heating, and has lethal effects on those who are subject to it. Around 1 billion people are thought to be affected by the situation and an estimated 2 million people are believed to die prematurely due to indoor air pollution¹¹⁹ 120 121 122.

Outdoor air pollution affects mainly the urban population, especially those in developing countries. As well as having serious health affects on both people¹²³ and the ecosystem, the emissions from heating and cooling of buildings and car fumes are among the so-called greenhouse gases and have a serious impact on the climate change process¹²⁴ ¹²⁵ ¹²⁶.

¹¹⁹ Smith, K.R., (1999). "Pollution Management in Focus", *Indoor Air Pollution Discussion Paper No. 4*, Environment Department, World Bank, Washington DC.

¹²⁰ Smith, K. R., (2000). "National Burden of Disease in India from Indoor Air Pollution", in *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 97, pp. 13286-93.

¹²¹ Campbell, H., (1997). "Indoor Air Pollution and Acute Lower Respiratory Infections in Young Gambian Children", *Health Bulletin*, Vol.55, pp. 20 –31.

¹²² Bruce N., L. Neufeld, E.B, and West, C., (1998). "Indoor Biofuel Air Pollution and Respiratory Health: The Role of Factors among Women in Highland Guatemala", *International Journal of Epidemiology*, Vol. 27, pp. 454-58.

¹²³ Romieu et. al., (2002). "Outdoor Air Pollution and Acute Respiratory Infections Among Children in Developing Countries", *Journal of Occupational and Environmental Medicine*, Vol. 44, No.7, pp. 640 – 649.

¹²⁴ Breuer G., (1980). *Air in Danger: Ecological Perspectives of the Atmosphere*, New York: Cambridge University Press

Soil pollution on the other hand is another major issue as it affects both the land and the water resources. Pollution due to use of chemical fertilisers, pesticides or heavy metal accumulation due to mineral extraction can be danger to both the fertility of the soils and to human health. Pollution on land is also dangerous as it can easily be transferred to water resources by rain and runoffs.

2.3.2.4 Climate Change

The issue of climate change is one of the hottest environmental topics of the day has significant interaction with people, one that is yet to be explored in further detail. The climate change, in simplest terms can be explained as the increase of surface temperature of the earth due to accumulation of "greenhouse" gases in the atmosphere. Although climate change and global warming are natural phenomena, the rates observed today are much higher and at worrying levels. This change in the rate is attributed to anthropogenic effects, particularly the effect of industrial revolution causing heat-trapping gases to accumulate in the atmosphere¹²⁷.

¹²⁵ Stewart, T. C., (1979). *Air Pollution, Human Health and Public Policy*, Lexington Books, New York.

¹²⁶ Miller, G. T., (1990). *Living in the Environment: an introduction to environmental science*, Wadsworth, Belmont.

 ¹²⁷ Intergovernmental Panel for Climate Change (IPCC), (2001). IPCC Third Assessment Report
 —Climate Change 2001, Impacts, Adaptation and Vulnerability. Geneva, World Meteorological
 Organization and United Nations Environment Programme. http://www.grida.no/climate/ipcc_tar/

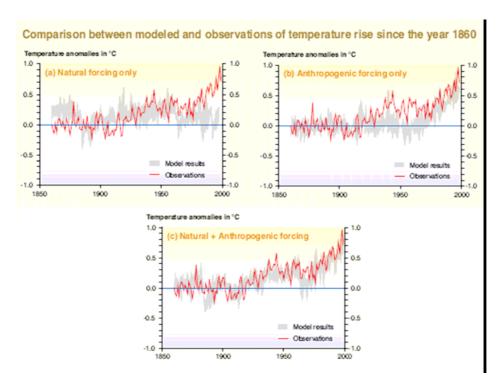


Figure 5. Climate Model Simulating Temperature Changes From Natural and Anthropogenic Factors¹²⁸

Source: Third Assessment Report —Climate Change 2001, Impacts, Adaptation and Vulnerability. (IPCC, 2001)

The problem of climate change is commonly associated with CO₂ (carbon dioxide) emissions and accumulation of this gas in atmosphere, and most policy and response options are focused to regulation of emissions of this gas¹²⁹.

Albeit cited as the most important anthropogenic greenhouse gas, CO_2 is only a part of the problem and there are other gases that contribute to climate change at varying levels including methane (CH₄), chlorofluorocarbons (CFCs), sulphur dioxide (SO₂), nitrous oxide (N₂O), NOx (nitrogen monoxide – NO and nitrogen dioxide – NO₂), carbon monoxide (CO) and ozone (O₃). Most of these gases are also associated with other environmental problems such as local pollution.

¹²⁸ A climate model can be used to simulate the temperature changes that occur from both natural and anthropogenic causes. The simulations represented by the band in (a) were done with only natural forcings: solar variation and volcanic activity; (b) were done with anthropogenic forcings: greenhouse gases and an estimate of sulfate aerosols. And (c) were done with both natural and anthropogenic forcings included." (IPCC, 2001)

¹²⁹ Skodvin, T. and Fuglestvedt, J.S., (1997). "A comprehensive approach to climate change: Political and scientific considerations", *Ambio*, Vol. 26, No. 6, pp. 351-358.

Climate change is expected to create a series of overall adverse effects, ranging from rising sea levels to elevated extinction rates of species; from adversely affecting the world's water resources to direct health effects on people. The United Nations Framework Convention on Climate Change (UNFCCC) and Intergovernmental Panel on Climate Change (IPCC) are trying to caution the nations of the world to take action before it is too late. Although the exact outcomes of climate change are hard to predict, scientists are convinced that by the time the actual problems start to arise, it will be too late to take any action that might slow down or reverse the change in climate.

Climate change is also expected to cause changes in water systems such as increases in heavy precipitation events, increases in the frequency and severity of drought, increases in the number of hot days, increases in the frequency of severe weather events, exacerbation of water shortages in many water-scarce areas of the world, and last but not least, increases in climatic variability which includes changes in frequency, intensity and duration of extreme events such as hot days, heat waves, heavy precipitation and fewer cold days¹³⁰.

The above changes have the potential to reduce the reliability of water supplies for rural communities while also increasing the importance of access to such supplies in order to buffer both higher demands for water associated with increased temperatures and the need for reliability to meet plant and domestic water supply needs as climatic variability increases. Even at the current water levels, reliability both in terms of quantity and in terms of quantity is one of the main issues, as it entails input problems in agricultural production and for other i.e. domestic uses of water.

Similar to other environmental problems, the poor on their own, are not a major cause of climate change, they are rather, victims thereof. The industrialised and the rapidly industrialising countries are more to be blamed for a large percentage

¹³⁰ IPCC, (2001). op. cit.

of the emissions. Unfortunately, all countries will get their fair share of problems that result from climate change.

Poverty is often coupled with a lack of capacity to adapt to climatic changes and the poor often live in environments that are risk-prone and are highly dependent on natural resources affected severely by climate change^{131–132}. Moreover, with little or no belongings or assets, in a situation characterised with lack of environmental entitlements, lack of support mechanisms in an already degraded environment, lack of capacity to be engaged in environmental management, lack of empowerment and limited participation; the poor become more vulnerable to effects of climate change.

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CHAPTER III

INTERNATIONAL RESPONSES ON POVERTY ALLEVIATION AND ENVIRONMENTAL CONSERVATION

With the recognition of the interconnectedness of poverty and environmental issues, many governments and international organisations have established policies and programmes to deal with poverty and environmental degradation. Among these, some are established with poverty in their focus, some with environment in their main mandate and some others with other issues such as economic cooperation. Although there are several other programmes and institutions that deal with poverty and environmental degradation, singularly or in an integrated manner, this analysis will focus mainly on the UNEP) UN Commission on Sustainable Development (CSD), Global Environment Facility (GEF), UNDP, WB, Organisation for Economic Cooperation and Development (OECD) and the role of Non-governmental Organisations (NGOs).

3.1 United Nations Environment Programme (UNEP)

Established as an outcome of the Stockholm Conference, UNEP is the principal UN body in the field of the environment, setting the global environmental agenda, promoting implementation of the environmental dimension of sustainable development and serves as an authoritative advocate of the global environment

UNEP's mission is to provide leadership and encourage partnerships in caring for the environment by enabling nations and peoples to improve their quality of life without compromising that of future generations. Although within the UN system UNDP outranks UNEP in financial donations, according to Chapter 38 of Agenda 21 both programs are to share equally in the mission for promoting sustainable development¹³³ ¹³⁴. Even with this clear mandate, UNEP usually has a coordinating role in environmental issues, and the fact that there are several other organizations that deal with the same issues, complicated the environmental governance arena¹³⁵.

UNEP has been severely criticised throughout its entire life span. One of the criticisms is that the UNEP publications usually agree with some "radical" environmentalists, which is not liked by the national governments. Although, few critics would dispute the sincerity and necessity of UNEP's goals, some may dispute the plausibility of attaining its goals. According to a famous criticism; "For sustainable development to represent a cultural-shift rather than an additional slogan, the UN system will require more than the paper-commitments of Agenda 21. It will require an overhaul of the mechanisms for coordination, and massive net additional funding. The lesson of the last decade is that whereas finance is definitely not forthcoming without structural reform, such reform is unlikely. As we shall see, in global terms, compared to other financial flows, the picture is bleak¹³⁶."

Najam argues that while UNEP is certainly not the perfect agency, and while there is much that can and should be improved, it is not the weakling or underachiever that it is portrayed as and it has performed relatively well in comparison to other agencies of the UN family both in terms of performance and legitimacy, despite all the limitations¹³⁷. Criticisms were also directed to the set-up of UNEP¹³⁸ and

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¹³³ UN Department of Public Information, (2000). Basic Facts About the UN, UN, NewYork.

Agenda 21, (1992). http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm (12/12/2005)

¹³⁵ Hierlmeier, J., (2002). "UNEP: Retrospect and Prospect - Options for Reforming the Global Environmental Governance Regime", *Georgetown International Environmental Law Review*, Vol. 14, pp. 767-805.

¹³⁶ Imber, M. F., (1994), "The United Nations' role in sustainable development", in C. Thomas (ed.), *Rio: Unraveling the consequences*, Frank Cass and Co, Portland, Oregon.

¹³⁷ Najam, A., (2003). "The case against a new international environmental organization", *Global Governance*, *Boulder*, Vol. 9, Iss. 3, pp. 367-384

its overarching mandate as the coordinator agency, and in spite of the limitations, UNEP has been considered relatively effective¹³⁹.

3.2 United Nations Commission on Sustainable Development (CSD)

The United Nations Commission on Sustainable Development (CSD) was established, by the UN General Assembly in December 1992, to ensure effective follow-up of the Rio Conference¹⁴⁰. It is a functional commission of UN Economic and Social Council (ECOSOC) and is responsible for monitoring, coordinating and implementing Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation. CSD meets annually and has fifty-three rotating members.

Within the UN system, the CSD is the central institution for the consideration of sustainable development. It is the first and the only UN body that consistently addresses the issues of environment and development in interaction. The CSD raises issues which are either not discussed at all or not covered sufficiently by other international UN forums, thus providing a platform for issues such as sustainable consumption and production patterns and energy. The CSD, as an intergovernmental body, is not a forum for negotiating international agreements or financial obligations, but is a soft law forum for the joint development of approaches to resolving global problems. The Commission's purpose is to ensure that sustainable development issues are given consideration within the UN system and to coordinate the United Nations' activities in the areas of environment and development.

The WSSD, held in Johannesburg in 2002, reaffirmed the CSD as the high-level forum for sustainable development within the UN system. After discussions at

¹³⁸ Conca, K., (1996), "Greening the UN: Environmental Organizations and the UN System" in T.G. Weiss and L. Gordenker, (eds.), *NGOs, the UN, and Global Governance,* Lynne Rienner, Boulder.

¹³⁹ Von Moltke, K., (1996). "Why UNEP Matters", Green Globe Yearbook of International Cooperation on Environment and Development, Oxford University Press, Toronto, pp. 55 –64.

¹⁴⁰ UN General Assembly Resolution Res. A/47/191, http://www.un.org/documents/ga/res/47/ares47-191.htm (10/12/2005)

the WSSD, an agreement was reached on a new approach and a programme of work for the period to 2017, with the aim of revitalising the Commission. Since then, major thematic clusters are addressed in a series of two-year cycles, coupled with cross-cutting issues. This new focus on major themes is aimed at improving the effectiveness of the institution, as the broad mandate and work programme of CSD made it difficult for the Commission to fulfil its function efficiently. It is important to underline that poverty eradication stands out as one of the most important cross-cutting issues identified by the CSD.

Cycle	Thematic cluster	Cross-cutting issues
2004/2005 2006/2007	Water, sanitation, human settlements Energy for austainable development, industrial development, air pollution/ atmosphere, climate change	Poverty eradication Changing unsustainable patterns of consumption and production Protecting and managing the natural resource base of economic and social development Sustainable development in a globalizing world Health and sustainable development Small island developing states Africa Other regional alternatives Means of implementation Institutional framework for sustainable development Gender equality Education
2008/2009	Agriculture, rural development, land, drought, desertification, Africa	
2010/2011	Transport, chemicals, waste management, mining, a ten-year framework of programmes on sustainable consumption and production patterns	
2012/2013	Forests, biodiversity, biotechnology, tourism, mountains	
2014/2015	Oceans and seas, marine resources, small island developing states, disaster management and vulnerability	
2016/2017	Overall appraisal - Agenda 21 - Programme of Further Implementation of Agenda 21 - Johannesburg Plan of Implementation	

Figure 6. The CSD's programme of work for the period from 2004 to 2017¹⁴¹. Source: The CSD Website, 2005.

Unfortunately, the CSD has a low rank in the institutional hierarchy and its decisions must be accepted by ECOSOC before the General Assembly, thereby limiting its effectiveness. The CSD makes policy recommendations, but does not have decision-making authority over other UN bodies such as UNEP or GEF. Moreover, the work of the CSD is heavily restricted by the fact that political decisions are made elsewhere: within the other UN organizations, at Conventions, in the Bretton-Woods Institutions¹⁴² and at the World Trade Organisation (WTO). Organisations such as the WTO have also been widely criticised for creating a

¹⁴¹ The crosscutting issues are to be addressed in all two-year cycles http://www.un.org/esa/sustdev/csd/csd11/CSD_mulityear_prog_work.htm (15/12/2005)

¹⁴² World Bank Group and the International Monetary Fund (IMF)

trading system that puts most developing countries at a disadvantage and having profound adverse effects on sustainable development, such as imposing heavy tariffs on agricultural products, which make up a large portion of the exports of many developing countries.

The CSD also plays a pioneer role in bringing civil society into the UN system. Since the WSSD, the CSD has also played the role of contact point for the Partnerships for Sustainable Development. Possibly the greatest obstacle to the success of the CSD's work is the conflict of interest between environmental and development issues. Also, usually sustainable development issues have a relatively low priority in national policy and national authorities other than environment and development institutions actually take key decisions having profound effects on sustainability, which can seldom be influenced by CSD decisions or recommendations.

3.3 Global Environment Facility (GEF)

GEF was created as a financial mechanism to support developing countries in their struggle with environmental issues by UNDP, UNEP and the WB, in 1991 and was re-structured in 1993, shortly after the Rio Conference.

The GEF, contrary to the WB and the UNDP had environment at the centre of its mandate, right from the start and was born around the same time with the sustainable development concept. Founded in 1991, restructured in 1994, the GEF is an independent financial organisation that provides grants to developing countries for projects that benefit the global environment and promote sustainable livelihoods in local communities. The GEF funds are utilised for projects addressing six complex global environmental issues: biodiversity, climate change, international waters, land degradation, the ozone layer and persistent organic pollutants. Created with funds with its three implementing agencies, the UNDP, the UNEP and the WB and thirty-two donor countries, GEF is the official financial mechanism for several international environmental conventions (CBD, UNFCCC, the Montreal Protocol of the Vienna Convention on Ozone Layer

Depleting Substances, the UN Convention to Combat Desertification, the Stockholm Convention on Persistent Organic Pollutants (POPs)) and requires the applicant countries to ratify the related convention to access its funds. The GEF funds are mainly aimed at meeting the objectives of international environmental conventions by developing countries. GEF also collaborates closely with other treaties and agreements. Implementing agencies are responsible for creating project proposals and for overall management of GEF projects¹⁴³.

GEF has provided over US\$ 4.5billion since its inception¹⁴⁴. It has three main funding possibilities; Full Size Projects (FSP), Medium Size Projects (MSP) and the Small Grants Programme (SGP). While the FSPs can only be executed by governmental institutions, the MSPs can be implemented by governments, private sector or NGOs. SGP, on the other hand, is solely for the use of civil society organisations, NGOs or Community-based Organisations (CBOs). While larger GEF projects receive criticisms about their effectiveness, the SGP has proven to be effective in reaching out for the poor and striking the fine balance between needs of people and the environment¹⁴⁵. The GEF Secretariat, however acknowledging this, criticises the SGP for lack of empirical evidence and qualitative and quantitative data that demonstrates the actual impact of the funds allocated on poverty alleviation and environmental conservation. The SGP's motto is "Acting Locally, Conserving Globally" and since its inception in 1992, has been providing financial and technical support to projects that conserve and restore the environment while also aiming to enhance people's well-being and livelihoods in GEF focus areas 146.

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¹⁴³ Silard, S.A., (1995). "The Global Environment Facility: A New Development In International Law and Organization", *George Washington Journal of International Law and Economics*, Vol. 28, pp. 607-654.

¹⁴⁴ http://www.gefweb.org/What_is_the_GEF/what_is_the_gef.html (12/12/2005)

¹⁴⁵ The GEF Small Grants Programme, (2002). *Hands on Action for Sustainable Development* 1992-2002.

¹⁴⁶ Ibid. pg. 6.

The GEF has been predominantly focused on the protection of the global environment, and although recognising the importance of poverty reduction on environmental protection, places explicit responsibility for poverty reduction with other actors, national and international 147. The GEF has been criticised for its slowness in approving projects. A medium size project approval, from project idea stage to actual approval, may take up to 5 years. Given the urgency of so many environmental challenges, this is unacceptably long. Also, another criticism was about the change in GEF's policy towards increasing importance of capacitybuilding. While it is obvious that capacity development will have a long-term positive impact on poverty reduction, most of the GEF projects have short timelines, and follow-up financing is not guaranteed. For instance, projects in the area of biodiversity last between two and five years as GEF can rarely make longterm commitments: it can allocate its funds for periods of only four years 148. This puts into question not only the environmental benefit; increasing the duration of project financing would also be sensible to help support longer-term capacity building.

The lack of cooperation between the implementing agencies has also been criticised since GEF's pilot phase. Because of conflicts between the World Bank on one side, and the UN organizations on the other, about the funding and implementation of projects, the original hope that synergistic effects could be created through the cooperation between these organizations was not realised¹⁴⁹.

The concept of global benefit also poses a fundamental problem. While this benefit appears obvious in some projects, it is difficult to identify in others¹⁵⁰.

¹⁴⁷ German Advisory Council on Global Change (WBGU) (2005). *World In Transition: Fighting Poverty through Environmental Policy*, Earthscan, London and Sterling

¹⁴⁸ Wells, M P., (1994). "The Global Environment Facility and prospects for biodiversity conservation", *International Environmental Affairs*, Vol.6 (1), pp. 69–97.

¹⁴⁹ WBGU (2005). op. cit. pp. 150 – 154.

¹⁵⁰ Horta, K., (1998). "Global Environment Facility", *Foreign Policy in Focus*, Vol. 39(3), pp. 1 – 4

While project ideas should be generated in a "bottom up" process whenever possible, in practice this is only rarely the case, except for the SGP.

3.4 World Bank

The World Bank Group, founded in 1944, is a specialised agency of the United Nations system, comprised of the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA) and the International Centre for Settlement of Investments Disputes (ICSIS). Among these, usually when referring to the World Bank activities, the first two are understood with their mandate to provide loans and development assistance to countries ranging from middle-income to the poorest¹⁵¹.

The World Bank, probably the largest funding source for governments, aimed to assist borrowing governments in solving their structural problems, infrastructure needs and alleviate poverty. However it has also been severely criticised about the lending and policies, and the effectiveness of the funds to reduce poverty has been challenged. While the World Bank defends its policies, claiming there is empirical evidence that the focus on growth is a sound strategy as it definitely is good for the poor, there had also been criticisms¹⁵².

The World Bank's "extreme poverty" line is calculated from the official national poverty lines in a sample of countries, then applying the purchasing power parity exchange rates (PPP¹⁵³), rather than current market exchange rates, to the national poverty lines. The World Bank's \$1 per day and \$2 per day poverty lines have been criticized for being arbitrary, and arbitrarily too low, which means that they

¹⁵¹ http://www.worldbank.org (10/11/2005)

¹⁵² Dollar, D., Kraay, A., (2000). op. cit.

¹⁵³ Exchange rates expressed in national currency units per US dollar

underestimate the number of people living in poverty¹⁵⁴. The World Bank in 1990 took a sample of 33 low- and middle-income countries, and found that a cluster of eight countries had poverty lines at around \$31 per month or \$1 per day. National poverty lines so calculated were then adjusted by the national consumer price index for years after 1985. In the late 1990s, the World Bank revisited the issue taking the same 33 countries and the same basket of goods and services that had been included in the earlier poverty line, and re-valued them using a new international price survey of 1993. However, with the 1993 prices the earlier cluster of national poverty lines around \$31 per month disappeared, so the World Bank selected the median of the 10 lowest of the 33 national poverty lines, which was roughly the fifth lowest. This resulted in the revised international poverty line of \$1.08 per day¹⁵⁵.

The problem with the changed methodology, is that it makes comparisons harder, as it is observed that the two methodologies give strikingly different results even when using the same data set¹⁵⁶.

Part of the difference in discrepancies in the findings of scientists also stem from the different definitions of the poverty concept. Ravallion used absolute poverty standards of \$1 and \$2 a day to identify the poor, on the other hand, Dollar and Kraay used the relative definition of poor as the lowest quintile of the population¹⁵⁷. It is important to note that both methodologies have inherent difficulties as in a richer country the absolute poverty line approach may marginalize poverty and cause an underestimation, whereas the latter may include too many people in the middle class thus part of the observed growth might be

¹⁵⁴ Aisbett, E., (2005). "Why are the Critics so Convinced that Globalization is Bad for the Poor?", *NBER Working Paper Series*, No. 11066

¹⁵⁵ Wade, R., (2002). "Globalization, Poverty and Income Distribution: does the liberal argument hold?", *LSE Development Studies Institute Working Paper No. 02-33*, London.

¹⁵⁶ Deaton, A., (2001). "Counting the world's poor: problems and possible solutions", *The World Bank Research Observer*, Vol.16, No.2, pp.125-47.

¹⁵⁷ Ravallion, M., (2000). "Prices, Wages and Poverty in Rural India: what lessons do the time series data hold for policy?" *Food Policy*, Vol. 25, pp. 351-364.

from the middle income class and a misrepresentation as to the rise in poor incomes 158.

Moreover, the data provided by the World Bank in terms of poverty reduction appears to be inconsistent; while in World Development Indicators 2001, a reduction in absolute poverty from 28 to 24% in 11 years is reported (people living under \$1 a day remained 1.2 billion from 1987 to 1998, thus with the increase in population there was a dramatic decrease in absolute poverty)¹⁵⁹, in the World Development Report 2000/2001 an increase of 20 million from 1987 to 1998 is reported¹⁶⁰. Another publication of the Bank claimed that the number of people living in poverty decreased by 200 million in the 18 years from 1980 to 1998¹⁶¹. Likewise, Chen and Ravallion indicated that the number of people living below \$1.08 per day fell dramatically from 1981 to 2001, by just under 400 million. However, the number of people living between the \$1.08 and \$2.15 lines increased even more, by around 680 million. As a result, the estimated number living under the \$2.15 poverty line actually increased by 285 million between 1981 and 2001¹⁶².

All these conflicting numbers and analyses were at the centre of criticisms towards the World Bank regarding poverty alleviation. On the environmental side, things were not looking bright either. One of the main environmental criticisms that the World Bank encountered centred around infrastructure projects, a particularly damaging activity was related to the construction of large dams. Besides having environmentally disastrous effects on the biodiversity, habitats and micro-climatic conditions of their surroundings, large dam constructions often

¹⁵⁸ Foster and Szekely, (2001). op. cit. pp. 2-5

¹⁵⁹ World Bank, (2001a). World Development Indicators 2001, Washington DC., pg. 67.

¹⁶⁰ World Bank, (2001a). op. cit.

World Bank, (2002), Globalization, Growth and Poverty: Building an Inclusive World Economy, Washington D.C.

¹⁶² Chen, S. and Ravallion, M., (2004). "How Have the World's Poorest Fared Since the Early 1980s?", Policy Research Working Paper Series 3341, World Bank, Washington DC.

caused displacement of local people, resulting in further impoverishing conditions.

Moreover, the remedies to poverty prescribed by the World Bank and the IMF include policies such as trade liberalisation, openness to foreign direct investment, privatisation of state enterprises, and deregulation or abolition of regulations that impede entry or restrict competition. These policy prescriptions have worsened poverty in developing countries by lessening the access of the poor to vital social services, deregulation of social security agencies, decreased health care services that participants received through salary contributions while increasing out-of-pocket costs. Most of the countries that received World Bank and IMF funds, have effectively privatised social services by reducing state participation in their financing, administration and delivery. In addition, the World Bank's support for large-scale infrastructure projects such as hydroelectric dams and agro-industrial projects has also intensified environmental degradation, deforestation and the displacement of people from their lands and livelihoods.

In light of the criticisms, the World Bank slowly shifted their policies and become more and more involved in other sides of the poverty equation, a partial shift in philosophy¹⁶³ ¹⁶⁴. The World Bank and the IMF, initiated a new concept in development, Poverty Reduction Strategy Papers (PRSPs) in 1999, which effectively were plans drawn by poor nations that describe how they envision creating the conditions for growth and social development to raise incomes and lower national poverty rates¹⁶⁵¹⁶⁶. The Poverty Reduction Strategies (PRSs) are an important step towards pro-poor development; as they came out of the

¹⁶³ Goldsmith, E., and Hildyard, N., (eds), (1984). *The Social and Environmental Impacts of Large Dams*, Wadebridge Ecological Centre, Wadebridge, Cornwall.

¹⁶⁴ McCully, P., (1996). *Silenced Rivers: The Ecology and Politics of Large Dams*, Zed Books Ltd, London.

¹⁶⁵ Bojö, J., and Reddy, R., (2003a). "Poverty Reduction Strategies and the Millennium Development Goal on Environmental Sustainability: Opportunities for Alignment", *World Bank Environment Department Paper No. 92*, Washington DC., World Bank

¹⁶⁶ Bojö, J., and Reddy, R., (2003b). "Status and Evolution of Environmental Priorities in the Poverty Reduction Strategies", *World Bank Environment Department Paper No. 93*, World Bank, Washington DC

realisation that the structural economic reforms suggested by IMF and World Bank failed to provide enough growth that results in sufficient progress against poverty¹⁶⁷. However, most of the initial PRSs failed to include environmental concerns, particularly quantified time-bound targets for improved environmental conditions or better resource management as a means to poverty alleviation. A thorough assessment of fifty-three PRSs at various stages demonstrated high variance, a low but improving average in environmental mainstreaming. Although environmental priorities, and in some PRSs, MDG perspective were included, only a few of them presented measurable targets and indicators relating to the environment¹⁶⁸.

The introduction of PRSs did not effectively change the attitude of the Bretton-Woods institutions. The document prepared by IMF and World Bank as a guidance for operational issues regarding the PSRs clearly shows the same approach still firmly in place:

"The impediments to faster sustainable growth should be identified and policies agreed to promote more rapid growth: such as structural reforms to create free and more open markets, including trade liberalization, privatisation and tax reform and policies that create a stable and predictable environment for private sector activity¹⁶⁹".

In fact, one only needs to look at the documents of the said institutions to observe that the criticisms raised are not unfounded:

"More than a half century of persistent efforts by the World Bank and others have not altered the stubborn reality of rural poverty, and the gap between rich and poor is widening¹⁷⁰".

¹⁶⁷ Reed, D., (2004). *Analyzing the Political Economy of Poverty and Ecological Disruption*, Washington DC., WWF Macroeconomics Program Office

¹⁶⁸ Bojö et. al., (2004). "Environment in Poverty Reduction Strategies and Poverty Reduction Support Credits", *World Bank Environment Department Paper No. 102*, World Bank, Washington DC.

¹⁶⁹ http://www.imf.org/external/np/pdr/prsp/poverty1.htm (12/12/2005)

¹⁷⁰ World Bank, (2003). World Bank Strategy for Rural Development, Washington DC.

The World Bank in 2001 also released its first coherent environment strategy, Making Sustainable Commitments. Since 1988, the World Bank has provided funds for environmental projects, mainly focusing on biodiversity conservation, and provided funds exceeding 13 billion USD, but done so without having a guiding strategy in place.

While criticisms are still ongoing, the environmental strategy is a welcome effort from the World Bank¹⁷¹. Although, environmentalists believe there is still a long way to go, the Bank has improved. This is particularly important, as the Bank, since 1988, had been one of the largest funder of biodiversity conservation, and has provided funds for environmental projects with funds exceeding 13 billion USD¹⁷².

3.5 United Nations Development Programme (UNDP)

United Nations Development Programme (UNDP), although also focusing initially on development, always had a more humanitarian approach than the World Bank, which especially in its early years, aimed at industrial development and infrastructure. At the very beginning, UNDP (or its predecessors – Expanded Programme of Technical Assistance, established in 1949 and United Nations Special Fund established in 1958) was providing advisory services, technical assistance to "underdeveloped" countries in all sectors covered by the UN and the specialised agencies as well as providing financial support to stimulating capital investment¹⁷³. The formal establishment of UNDP was a process that was finalised in 1966. In the first two decades, UNDP concentrated on its country programme development. It was not until 1977, the UN Conference on Desertification UNDP did much work on environmental issues. Starting from late 1980's, the UNDP became more oriented towards women in development,

¹⁷¹ World Bank, (2001b). *Making Sustainable Commitments: An Environment Strategy for the World Bank*, Washington DC.

¹⁷² http://www.worldbank.org (13/10/2005)

¹⁷³ ECOSOC Res. 222 (IX) of 14 and 15 August 1949 and the UN General Assembly Res. 30 (IV) of 16 November 1949.

environment and sustainable development, increased cooperation with NGOs and private sector development. Becoming a partner in the administration of the newly created GEF, soon to become the largest-ever provider of funds to environmental issues, UNDP also became the birthplace of the human development concept. Under the administration of Speth, one of the founders of the World Resources Institute and an environmentalist by heart, UNDP became more and more environment conscious and sustainable development oriented. Environmentally sound development became a guiding principle and combined with the human development concept, to form "sustainable human development". Speth also introduced poverty reduction into UNDP's agenda, as the organisation was working on the ground in some of the world's poorest countries¹⁷⁴.

UNDP devised the HD concept and index, as well as the HP concept and index. Although much more comprehensive than the World Bank's poverty definition and included aspects of poverty other than monetary issues, HDI and HPI were criticised about data quality as data were provided by governments¹⁷⁵ ¹⁷⁶. Also, one of the failings of the HD concept was argued to be a non-responsiveness to environmental matters, but conversely, the presence of HP concept and a possible addition of environment angle to HD seemed problematic in creating a lot of confusion. Still, Morse argued addition of sustainable development indicators to HD would prove valuable and a late correction to the UNDP's negligence¹⁷⁷.

UNDP and the whole UN system, created and agreed on a new policy instrument, the Millennium Development Goals (MDGs), bringing together the whole UN system and their agendas and creating the missing link between many of the global challenges. Mark Malloch Brown the administrator following Speth, re-

http://www.yale.edu/unsy/UNDPhist.htm (12/12/2005)

¹⁷⁵ Murray, C.J.L., (1991). "Development Data Constraints and the Human Development Index", *United Nations Research Institute for Social Development, Discussion Paper 25*, Geneva.

¹⁷⁶ Loup, J., D. Naudet, D., and Developpement et Insertion Internationale (DIAL), (2000). "The State of Human Development Data and Statistical Capacity Building in Developing Countries", *Human Development Report Office Occasional Papers*, New York

¹⁷⁷ Morse, S. (2003). "Greening the United Nation's Human Development Index?", *Sustainable Development*, Vol.11, pp. 183-198.

oriented the organisation to focus on six thematic areas, in line with the MDGs. The thematic areas of UNDP are democratic governance, poverty reduction, crisis prevention and recovery, information and communications technology, energy and environment and HIV/AIDS. With the ongoing UN Reform, the UNDP further aligned itself and included the ICT for development aspect under democratic governance thematic area.

The MDGs include eight goals monitored through eighteen targets and forty-eight indicators. Environment relates to many of the MDGs because of the strong links to poverty. In fact, neither the concepts nor the areas of intervention of the MDGs agreed by the UN General Assembly in 2000 were new, although they have not been at the centre of UN's development agenda in a coherent manner¹⁷⁸. The newness and the apparent success of MDGs come from the political consensus around them. Also, the fact that they have time bound and quantifiable limits, makes them more powerful than mere UN declarations¹⁷⁹. Nonetheless, MDGs are not without critics, Fukuda-Parr argues as they leave out many issues such as employment, reproductive health, they may prove to be a data collection burden on national governments, could lead to top-down planning instead of participatory methods, could lead to a preoccupation with quantitative data instead of qualitative and their meaningfulness will only be achieved if there is sufficient national ownership. Moreover, no concrete suggestions towards securing the financial resources required to fulfil the goals foreseen in MDG were made.

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¹⁷⁸ UN General Assembly Resolution GA RES/55/2, (2000). "The Millennium Declaration". http://daccess-ods.un.org/TMP/9113930.html (10/10/2005)

¹⁷⁹ Fukuda-Parr, S, (2004). "Millennium Development Goals: Why They Matter", *Global Governance*, Vol.10, pp. 395-402.

The UN Millennium Development Goals

Goal 1: Eradicate extreme poverty and hunger

- Reduce by half the proportion of people living on less than a dollar a day
- Reduce by half the proportion of people who suffer from hunger

Goal 2: Achieve universal primary education

Ensure that all boys and girls complete a full course of primary education

Goal 3: Promote gender equality and empower women

 Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015

Goal 4: Reduce Child mortality

Reduce by two thirds the mortality rate among children under five

Goal 5: Improve maternal health

Reduce by three quarters the maternal mortality ratio

Goal 6: Combat HIV/AIDS, malaria and other diseases

- Halt and begin to reverse the spread of HIV/AIDS
- Halt and begin to reverse the incidence of malaria and other major diseases

Goal 7: Ensure environmental sustainability

- Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources
- Reduce by half the proportion of people without sustainable access to safe drinking water
- Achieve significant improvement in lives of at least 100 million slum dwellers, by 2020

Goal 8: Develop a global partnership for development

- Develop further an open trading and financial system that is rule-based, predictable and non-discriminatory, includes a commitment to good governance, development and poverty reduction— nationally and internationally
- Address the least developed countries' special needs. This includetariff- and quota-free access for their exports; enhanced debt relief for heavily indebted poor countries; cancellation of official bilateral debt; and more generous official development assistance for countries committed to poverty reduction
- Address the special needs of landlocked and small island developing States
- Deal comprehensively with developing countries' debt problems through national and international measures to make debt sustainable in the long term
- In cooperation with the developing countries, develop decentand productive work for youth
- In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries
- In cooperation with the private sector, make available the benefits of new technologies— especially information and communications technologies

Figure 7. Millennium Development Goals¹⁸⁰ Source: The UNDP MDG Website, 2005.

Together with the European Commission, moreover, UNDP has launched the Poverty and Environment Initiative (PEI), which is aimed at formulating practicable recommendations to address environmental problems in poor countries. After a slow start, the PEI is proving to be ground breaking in terms of generating new knowledge about poverty-environment linkages and new methods for addressing them. PEI's work in five countries has catalysed demand for a

¹⁸⁰ UN, http://www.undp.org/mdg (18/12/2005)

global poverty-environment network: which is helping to shape a much larger EU contribution¹⁸¹.

3.6 Organisation for Economic Cooperation and Development (OECD)

The OECD grew out of the Organisation for European Economic Co-operation (OEEC), which was set up in 1947 with support from the United States and Canada to co-ordinate the Marshall Plan for the reconstruction of Europe after World War II. Created as an economic counterpart to North Atlantic Treaty Organisation (NATO), the OECD took over from the OEEC in 1961 and, since then, its mission has been to help governments achieve sustainable economic growth and employment and rising standards of living in member countries while maintaining financial stability, so contributing to the development of the world economy. Its founding Convention mandates the OECD to assist "sound economic expansion" in member countries and non-member countries in the process of economic development, and to contribute to growth in world trade on a multilateral, non-discriminatory basis 182. Its mandate prescribes OECD to be actively involved in poverty alleviation.

The OECD is a unique forum where the governments of thirty democracies work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD with its 30 member countries, active relationships with around 70 other countries, NGOs and civil society, has a commitment to democratic

¹⁸¹ Department for International Development (DFID), (2002). *Poverty and Environment*, London, http://www.dfid.gov.uk/pubs/files/povertyandenvironment.pdf (15/12/2005)

 $[\]frac{182}{\text{http://www.oecd.org/document/18/0,2340,en_2649_201185_2068050_1_1_1_1,00.html\#what}}{(17/12/2005)}$

government and the market economy. The secretariat collects data, monitors trends, and analyses and forecasts economic developments. It also researches social changes or evolving patterns in trade, environment, agriculture, technology, and taxation. The OECD is one of the world's largest sources of comparable statistical, economic, environmental and social data (ranging from national accounts to economic indicators, the labour force, trade, employment, migration, education, energy, health, industry, taxation and the environment).

Over the past decade, the OECD has tackled a range of environmental issues and has been involved with the sustainable development since Rio Conference. The Development Assistance Committee (DAC) of the OECD is the principal body through which the OECD deals with issues related to co-operation with developing countries. OECD donor countries grouped in the DAC account for more than 90% of ODA worldwide. It is a key forum of major bilateral donors through which, donors work together to increase the effectiveness of their common efforts to support sustainable development. The DAC concentrates on two key areas: a) how international development co-operation contributes to the capacity of developing countries to participate in the global economy, and b) the capacity of people to overcome poverty and participate fully in their societies. OECD/DAC keeps track of the ODA targets and the levels of actual ODA allocations. DAC also prepares guidelines for its members for the conduct of their development cooperation programmes. Among these are the Guidelines for Poverty Reduction (2001), Strategies for Sustainable Development (2001) and a series of guidelines on aid and environment.

3.7 Non-Governmental Organisations (NGOs)

Civil society involvement in decision-making through NGOs and Community-based Organisations (CBOs) as the "third sector" in sustainable development disclosure has been important both in terms of public awareness and in terms of putting private sector and governments under pressure of legitimation with regard to social and environmental common benefits. NGOs felt the governments of the world were not taking the issues of poverty, environmental degradation and

sustainable development seriously enough, had objections to the means and even to the ends, and they voiced their concerns and tried to create pressure on them by informing the public.

In the international platforms, NGOs had been recognised for their contributions; they have been holding a consultative status in ECOSOC for a long time and have become important partners who are able to influence discussions and agendas that win public attention.

NGOs, with increasing specialisation in their subjects, become more competent in their fields and are more and more sought after by governments and other partners as experts. Although NGOs with their expertise, can influence the policy making in a positive way, the increasing interaction with governments also bring the risk of loosing touch with their grassroots and loosing their autonomy, as well as their credibility.

NGOs offer a bottom-up inductive approach to bettering communities and addressing human concerns. According to Schubert many of the thousands of environmental NGOs in Asia are "grass-roots movements of people concerned about specific conditions in local eco-systems" ¹⁸³. Some critics of NGO involvement in local community concerns may argue that many NGOs are actually products of governments that are set up to implement official agenda as a tool to disguise political agenda ¹⁸⁴. There are also several failed NGO projects and questionable activities. Uncontrolled proliferation of NGOs and NGOs striving to take their share from the financial resources flow to developing world has been observed. Sincerity as well as expertise and public support is integral to the success of NGOs for influencing the political agenda. It is also important that NGOs avoid becoming invasive in their involvement. This is especially true for

¹⁸³ Schubert, L., (1993). "Environmental politics in Asia", in S. Kamieniecki (ed.), *Environmental politics in the international arena*, State University of New York Press, Albany, NY.

¹⁸⁴ Toh, S., and Floresca-Cawagas, V., (1997). "Towards a people-centered education: Possibilities and struggles in the Philippines", *International Review of Education*, Vol. 43, No. 5/6, pp. 527-545.

NGO support regarding conservation¹⁸⁵. NGOs assuming the role of the governments and forcing top-down remedies to local or community level problems are doomed from their start.

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¹⁸⁵ Chapin, M., (2004). "A Challenge to Conservationist", World Watch Magazine.

CHAPTER IV

EUROPEAN UNION'S APPROACH

The EUhas been committed to sustainable development, has been gradually integrating certain principles onto its environment policy, which would eventually form the basis for sustainable development since the Stockholm Conference. Soon after the Rio conference the EU has started integrating environmental concerns to other sectors as well, although the implementation has been very slow. This chapter will concentrate on analyse the EU Environmental Policy (Towards Sustainable Development) and EU Regional Development Policy to clarify the EU's policies at the community level. This section will also review EU's Development Policy and the position of the EU at the WSSD to demonstrate the external dimensions of the EU approach with respect to sustainable development. Moreover, this chapter will look into the EU and its sustainable development objectives from the enlargement perspective and the current 25 members.

- 4.1 Policies at the EU Level
- 4.1.1 Environmental Policy Towards Sustainable Development

The European approach to the environment has been characterised as an internal response to the emerging concerns at the aftermath of the Stockholm Conference. The first Environmental Action Programme (EAP), prepared immediately after the Stockholm Conference, covered the years from 1973 to 1976, through which the European Community (EC) set up the guiding principles and focused on prevention and elimination of problems arising from noise and pollution, activities

to improve quality of with special reference to discharges of toxins and pollution caused by creation of dangerous chemicals ¹⁸⁶.

The second EAP covered the years from 1977 until 1982 and brought a change in the approach to environmental problems, from remedial actions to preventive actions. It aimed to complement the deficiencies of the previous common environmental policies. The second EAP, being an extended continuation of its predecessor, had given a higher priority to water and air pollution; extended the measures related to noise and introduced the concept of Environmental Impact Assessment (EIA). In the second EAP, there were also specific references to waste management and EIA as well as the focus to provide a framework for the efficient functioning of the Polluter Pays Principle¹⁸⁷.

The third EAP covering the years between 1982 and 1987 differs from its two predecessors both by including issues that were not elaborated in them and by symbolising the evolution of EC Environmental Policy. Its main achievement was an attempt to elaborate an overall strategy of natural resources preservation in the EC. It defined the EIA procedure, included land use planning in the broader concept of environmental protection and tried to incorporate environmental matters into other EC policies.

In the context of the third EAP, there was particular emphasis on reduction of noise originating from cars and aircraft, combating trans-boundary pollution, taking preventive measures related to dangerous chemicals and encouraging the development of "Clean Technologies". The third EAP was also the first policy document to provide funding to environmental projects, devised as a mechanism to implement the "Prevention of Pollution at the Source Principle" with the introduction of clean technologies¹⁸⁸.

¹⁸⁶ Egeli, G., (1996). "Avrupa Birliği ve Türkiye'de Çevre Politikaları", Türkiye Çevre Vakfı, Ankara.

¹⁸⁷ Ekeman, E., (1998)."Avrupa Birliği ve Türkiye'nin Çevre Politikalarının Karşılaştırmalı İncelemesi", İktisadi Kalkınma Vakfı Yayınları.

¹⁸⁸ Egeli, (1996). pp. 29 - 50

The 1986 Single European Act (SEA), which came into force in 1987, marked a decisive turning point in the development of the EC. It committed the (then twelve EC) Member States to complete the Single European Market (SEM), i.e. a Common Market, by January 1993 and to establish the European Monetary Union (EMU). The SEA also committed the signatories to EC institutional reform, designed primarily to facilitate the establishment of the SEM. More specifically, the SEA extended Qualified Majority Voting (QMV) in the Council of Ministers and introduced the "Co-operation Procedure", which further increased the legislative powers of the European Parliament with regard to SEM legislation¹⁸⁹.

The SEA strengthened the legal basis for EC environmental, social and regional policies. There has never been a common formal environmental policy, until the SEA, although policy-making has been underway via the EAPs. Prior to the SEA, Community application of environmental policy had depended upon an interpretation of general provisions contained within the Treaty of Rome (such as the Preamble which referred to the goal of improving 'general living and working' conditions). It added Articles 130R-130T to the Treaty of Rome and added an explicit chapter on environmental policy to the same (Title VII)¹⁹⁰, through which more emphasis was given to the environmental policy of the EC. The objectives of the environmental policy were as follows:

- a) to preserve, protect and improve the quality of the environment;
- b) to contribute towards protecting human health;
- c) to ensure a prudent and rational utilisation of natural resources.

The fourth EAP was set up in the same year as the SEA and although not substantially different from the previous EAPs, it introduced new problem areas and principles (i.e. principles introduced by SEA, Polluter Pays Principle; Principle of Prevention; Proximity Principle; Precautionary Principle; High Level

¹⁹⁰ Single European Act, (1987). http://europa.eu.int/eur-lex/en/treaties/selected/livre509.html pp.11-12 (Article 25) (17/12/2005)

¹⁸⁹ Mazey, S., (2001). "European Integration: Unfinished journey or journey without end?" in J. Richardson (ed.) *European Union: Power and Policy Making* (2nd ed.), Routledge, London and New York.

of Protection Principle; Integration Principle). The focus moved from recovery to prevention and the main four issues elaborated were:

- a) Pollution prevention;
- b) Improvement of resource management;
- c) International co-operation and
- d) Establishment of supportive instruments.

The fourth EAP aimed to implement the environmental policy principles set out by the SEA and focused on the interconnectedness of environmental and economic issues and effective implementation of environmental legislation. These new principles laid the foundations for the EU's gradual shift from solely focusing on environmental protection to sustainable development. These principles were fundamentally important as they brought penalties to polluters, promoted precaution in the use of resources, thus sustainability and the integration of all environmental concerns to other sectoral policies, all of which translated to the sustainable development objectives of today. The new policy areas introduced by the 5th EAP were atmospheric pollution, drinking water and marine waters, biotechnology, nuclear safety and a new approach to environmental resource management.

While the world was all engulfed in Rio Conference, serious discussions were underway in Europe, and there was much to change in Maastricht, in 1992, where the Treaty on European Union was signed, which created the European Union by merging European Coal and Steel Community, European Economic Community and European Atomic Agency. The Maastricht Treaty strengthened the European environmental policy by stating that the promotion of sustainable and non-inflationary growth respecting the environment should be one of the basic tasks for the European Union. It also introduced the "precautionary principle", which set up the rules of acting in a situation when the seriousness of a potential threat to the environment is uncertain¹⁹¹.

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 $^{^{191}}$ The Treaty on European Union, (1992). Article 130r, $\underline{\text{http://europa.eu.int/eur-lex/lex/en/treaties/dat/11992M/htm/11992M.html#0001000001}$ (14/12/2005)

The Treaty on European Union also obliged the decision makers to integrate environmental protection into other EU policies. From then on the decisions concerning environmental issues had to be taken by a qualified majority in the Council of Ministers and Member States were allowed to take tougher protection measures than those adopted on the EU level.

The Fifth Environmental Action Programme "Towards Sustainability" covered the period from 1992 to 2000. This EAP declared that the Community's environmental policy should emphasise the use of market oriented tools for the protection of the environment, improve the collection and exchange of information between producers and consumers and establish new institutions and funds addressing environmental needs. The fifth Programme stressed the importance of public participation in the decision making process and enhanced building partnerships with shared responsibilities between governments, businesses and the general public. Five key sectors were targeted in the programme because of their environmental impact i.e.: industry, tourism, transport, energy and agriculture.

The fifth EAP was prepared in parallel with the Rio Conference and the launch of Agenda 21. It constituted the Community's first commitment to sustainable development. It can be seen in terms of five objectives:

- (1) strategies for seven environmental priority issues (climate change, acidification, biodiversity, water, urban environment, coastal zones and waste) and for the management of risks and accidents;
- (2) target sectors into which environmental concerns should be integrated (industry, energy, transport, agriculture and tourism);
- (3) broadening the range of instruments;
- (4) information, transparency of approach and development of the concept of shared responsibility;

(5) the international dimension reflecting global issues and the Rio Conference¹⁹².

Some environmental targets were set via the 5th EAP, but in general there was a lack of quantifiable targets and monitoring mechanisms. The Commission, in its review of the plan in 1996, confirmed these priorities and proposed a new priority on the implementation of existing measures¹⁹³.

In 1998 the European Parliament and the Council adopted a decision on the review of the fifth EAP. It reiterated the commitment of the Community to its general approach and strategy and called for increased efforts in their implementation. The decision also committed the Commission to submit a global assessment of the implementation of the programme, giving special attention to any revision and updating of objectives and priorities which may be required, and accompanied, where appropriate, by proposals for the priority objectives and measures that would be necessary beyond the year 2000¹⁹⁴.

The programme set out an ambitious vision for sustainable development, leading to its incorporation in the Treaty of Amsterdam and to the process of integration, which was highlighted by the Cardiff European Council in 1998. However, practical progress towards sustainable development has been rather limited, mainly because there was no clear recognition of commitment from Member States and stakeholders and little ownership by other sectors of the programme. Nevertheless, the fifth programme has stimulated action at EU level that has led to environmental improvements. It also brought further progress on several fronts.

¹⁹² The Fifth Environmental Action Programme, "Towards Sustainability: A European Community Programme of policy and action in relation to the environment and sustainable development", (1992). http://europa.eu.int/comm/environment/env-act5/5eap.pdf (14/12/2005)

¹⁹³ Commission of the European Communities, COM(95) 624, (1995). "Progress Report on implementation of the European Community Programme of Policy and Action in relation to the environment and sustainable development 'towards sustainability'" http://europa.eu.int/comm/environment/env-act5/prog-rep.htm (15/12/2005)

¹⁹⁴ Decision No: 2179/98/EC of the Parliament and the Council of 24 September 1998 on the review of the European Community Programme of policy and action in relation to the environment and sustainable development "Towards Sustainability". http://europa.eu.int/comm/environment/actionpr.htm (14/12/2005)

First it added the concept of "sustainable growth respecting the environment" to the European Community's tasks and wrote the precautionary principle into the article on which environment policy is founded (Article 174, ex Article 130r, of the EC Treaty). Beyond that, it upgraded action on the environmental to the status of a "policy" in its own right and made qualified majority voting in the Council the general rule. The only exceptions are matters such as environmental taxes, town and country planning and land use, where unanimity remains the norm. As for the co-decision procedure, this was confined to issues concerning the internal market.

The Maastricht Treaty established a more efficient decision-making procedure for environment policy, replacing unanimity in the Council by qualified majority voting as the general rule. However, the arrangements were still complex, with several different procedures existing side by side:

- the co-decision procedure for general action programmes;
- the cooperation procedure for the environment policy;
- simple consultation, with unanimous adoption by the Council, for measures concerning taxation, town and country planning, land use, or energy supply.

In addition, there was sometimes a grey area between environmental measures (Article 175, ex Article 130s) and the approximation of laws in connection with the internal market (Article 95, ex Article 100a). Since the co-decision procedure applies to the approximation of laws, there was a risk of conflict between Article 100a and Article 130s as the legal basis for action relating to the environment¹⁹⁵...

The entry into force of the Treaty of Amsterdam has simplified the situation, replacing the cooperation procedure by the co-decision procedure. This reorganisation has the advantage of reducing the number of procedures to two (the member states still wished to retain unanimity for the fields indicated above). This makes the Treaty more readable and reduces the risk of conflicts over the legal basis.

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¹⁹⁵ The Treaty on European Union, (1992), op. cit.

The last one of EAPs, which is currently in force, the Sixth Environment Action Programme, "Our Future – Our Choice 2000 – 2010", focuses on areas where more action is needed and new European initiatives will make a difference. It sets out objectives for the next 10 years and beyond. The sixth EAP recognises that key to long-term welfare, in Europe and around the world, is "sustainable development": finding ways of improving the quality of life without causing harm to the environment, future generations or the people of both the rich and developing world. It also stresses the need to encourage business to go further, on a voluntary basis and through legislation, on the grounds that increased attention to environmental measures will improve efficiency and productivity. Moreover, it counts on the expanding market for green goods, leading to increased innovation and expanded job opportunities, for European businesses to prosper in this expanding market.

The sixth EAP supports and encourages such developments. It also identifies four areas where new effort and impetus is needed. The Commission proposes to take strong action to:

- a) Tackle climate change
- b) Protect nature and wildlife
- c) Address environment and health issues
- d) Preserve natural resources and manage waste

In the 6th EAP, emphasis is being placed on diversifying environmental instruments and, in particular, on introducing environmental taxes (the "polluter pays" principle), environmental accounting and voluntary agreements. The Sixth EAP states that no progress can be made unless environmental legislation is actually implemented, and effective implementation involves introducing incentives for economic operators (businesses and consumers).

Since its inclusion in the Treaty in 1997, sustainable development is recognised as an overarching goal of the EU. The EU in 2001, have established a Sustainable

Development policy, which in general terms, includes poverty reduction and social exclusion, as one of the main areas that needs to be tackled¹⁹⁶. The "Cardiff process" laid the groundwork for sustainable development and urged the Council to develop strategies integrating environmental concerns into EU policies¹⁹⁷.

The basic message of the Strategy on Sustainable Development is that ultimately, the economic, social and environmental dimensions of sustainability must go hand—in-hand and mutually reinforce one another: "Sustainable development offers the European Union a positive long-term vision of a society that is more prosperous and more just, and which promises a cleaner, safer, healthier environment - a society which delivers a better quality of life for us, for our children, and for our grandchildren 198".

The Strategy also aims to change the policy making process in the EU and to integrate sustainable development into all sectors, and improving policy coherence as well as addressing unsustainable production and consumption patterns both within the EU and in the global context. The Sustainable development policy, lists biodiversity loss, greenhouse gas emissions and poverty among the main threats against sustainable development The reflection of the policy at the Treaty level is relatively new (1997 Amsterdam Treaty) to the EU, although the concept has been used and has become an objective for the EU since 1988 Rhodes Council 199.

The EU has very recently started preparing thematic strategies for the implementation of the 6th EAP. Among these the very latest one is the Thematic

¹⁹⁶ Communication from the Commission, COM(2001) 264, (2001). "A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development" http://europa.eu.int/eurlex/en/com/cnc/2001/com2001_0264en01.pdf (19/12/2005)

¹⁹⁷ Communication from the Commission to the European Council, COM (98) 333, (1998). "Partnership for integration - A strategy for Integrating Environment into EU Policies"

¹⁹⁸ COM(2001) 264, op. cit.

¹⁹⁹ Collier, U., (1997). "Sustainability, subsidiarity and deregulation: new directions in EU environmental policy", *Environmental Politics*, Vol.6 (2), pp. 1-23.

Strategy for Sustainable Natural Resource Use (Resource Strategy). At the time of the study the final official version of the document was not released and the final consultations were not completed yet. The unofficial document, is a promising effort to complement the sustainable development strategy, puts emphasis on the importance of integration of environmental concerns into other policies that affect environmental impacts of natural resources use. However, it is also important to note that the thematic strategy does not attempt to implement specific initiatives, it purely sets out an analytical framework²⁰⁰.

According to the Consultation Paper for the Preparation of a European Union Strategy for Sustainable Development, the relative poverty in average_was 17% in the EU (excluding Finland and Sweden), while vulnerability was more widespread and 32% of Europeans were experiencing at least one annual spell of low income over a period of three years, while 7% of the population – around 25 million persons – were experiencing persistent poverty during the same period. Persistent income poverty ranges from around 3% in Denmark and the Netherlands to 12% in Portugal and that there were significant income inequalities threatening social cohesion.

At EU level, the poorest 20% of the population receives less than one-fifth of the income of the richest 20%. Social benefits reduce the proportion of poor people in all Member States but to very differing degrees, the reduction ranging from around 10% in Greece and Italy to over 60% in Denmark²⁰¹.

The EU is moving in the right direction to include sustainable development to its policies; one example would be the "EU Strategy for Growth and Jobs" endorsed by the Spring Summit of 2005, giving high priority to more sustainable use of natural resources. It also calls for the EU to take the lead towards more sustainable consumption and production in the global economy. Europe therefore

Communication from the Commission to the Council, the EP, the European Economic and Social Committee and the Committee of the Regions, COM(2005)670, (2005). "Thematic Strategy on the Sustainable Use of Natural Resources" http://europa.eu.int/comm/environment/natres/pdf/com natres en.pdf (25/12/2005)

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²⁰¹ COM(2001) 264, op. cit.

needs a long-term strategy that integrates the environmental impacts of using natural resources, including their external dimension (i.e. impacts outside the EU, including on developing countries) in policymaking. However, some of the issues such as trade vs. sustainable development pose problems for the EU as it is difficult to reconcile the EU's "historic commitment to economic development with its new concern to protect the environment"²⁰².

The EU has traditionally concentrated on poverty issues in the framework of its social policy and with a view to eliminate disparities among the regions and environmental issues under its environment policy. The recent trend of bringing the two together under the sustainable development policy has not yet demonstrated itself clearly in implementation. While this analysis will not look into the social policy, the following section will provide an overview of the regional development policy, with particular emphasis on environmental conservation and sustainable resource use.

It is important to note here that, although this analysis considers EU more at the policy level, and just briefly at the implementation level with a view to observe compliance vs. non-compliance, it nevertheless does not specifically look into the actual levels of implementation by any individual member state in detail. This might result in partial underestimation as well as overstatement of the actual implementation of those policies that reflect poverty environment interactions or the sustainable development discourse by individual member states. While in some of the former EU members, such as the UK and Germany (the recognition and action about the issue is more coherent, new members are far from being inline²⁰³. It is very challenging for the Union to act as one, with all the

²⁰² Baker et. al., (1997). "Introduction: The Theory and Practice of Sustainable Development in the EU Perspective", in *The Politics of Sustainable Development: Theory, Policy and Practice within the EU*, S. Baker, M. Kousis, D. Richardson and S. Young, (eds.), Routledge. London, pp. 28 -32.

²⁰³ WBGU, (2005). pp. 179 – 185.

complicated procedures and control, and also an advantage as EU, acting together, may easily become an international standard–setter and an important actor²⁰⁴.

4.1.2 Regional Development Policy

It is important to first clarify the meaning of region in the EU context before going into the depths of the EU Regional Policy. Region in the EU can range from provinces in federal member states like Austria and Germany to regions in Spain, Italy, the Netherlands and to local administrations in the UK, Sweden and Greece. The regions in the EU are classified into three different levels of Nomenclature of Territorial Units for Statistics (NUTS). The NUTS classification is hierarchical. It subdivides each Member State into NUTS level 1 territorial units, each of which is subdivided into NUTS level 2 territorial units, these in turn each being subdivided into NUTS level 3 territorial units²⁰⁵. The NUTS classification has important implications for the regions of the EU as it is important in regional planning and the eligibility to the EU's incentive mechanisms.

Within the EU there are profound differences in GDP, education and health services, infrastructure and ecological indicators between member states and between regions. Regional development in the EU context has two important underlying concepts, the concept of solidarity and the concept of cohesion. While the solidarity principle dictates the elimination of economical and social disparities between regions and the people with a view to sustainable development, the cohesion principle builds on the assumption that the elimination of income differences and a better distribution will be beneficial to the overall EU. The disparities between regions becomes even more important as around 70% of the EU legislation has relevance to local administration units. EU, with its Regional Development Policy aims to reduce these regional disparities and to

²⁰⁴ Vogler, J., (2005). "The European contribution to global environmental governance" *International Affairs*, Vol. 81, No.4, pp. 835-850.

²⁰⁵ (European) Commission Regulation No 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS), http://europa.eu.int/eur-lex/en/archive/2003/l_15420030621en.html (12/12/2005)

ensure similar if not equal income standards and economic development between member states and regions.

The former funding period of structural funds had identified six objectives, which were decreased to three during the reform of regional policy carried out in 1999 aimed at increasing the concentration of assistance, but also the simplification and decentralisation of its management. The reform also introduced a clearer division of responsibilities and stricter application of the principle of subsidiarity²⁰⁶. The three NUTS levels converge with the three objectives of the EU's reformed regional policy as follows:

Objective 1: is promoting the development and structural adjustment of regions whose development is lagging behind (this refers to a GDP per capita of less than 75% of the EU average and covers area with around 20% of the EU population at the NUTS2 level). Around 75% of the funds are directed to objective 1 and funds are mainly used for basic infrastructure development.

Objective 2: is supporting economic and social conversion in industrial, rural, urban or fisheries dependent areas facing structural difficulties. The total amount that is available for objective 2 is around 11% of the total budget.

Objective 3: is modernising systems of training and promoting employment. Measures financed by Objective 3 cover the whole Union except for the Objective 1 regions, where measures for training and employment are included in the catch-up programmes. Around 12% of the total budget is allocated to this objective.²⁰⁷

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²⁰⁶ Subsidiarity is the principle defined in the Maastricht Treaty (Art. 3b) that allocates the exercise of the competences among the Community and other administrative authorities such as Member States and regions.

²⁰⁷ http://europa.eu.int/scadplus/leg/en/lvb/l60013.htm (15/12/2005)

Under the goal of eliminating regional disparities and alleviation of poverty the EU's regional policy operates through Structural Funds, The Cohesion Fund and the Pre-Accession Aid.

Structural Funds

The Structural Funds, a set of four funds combined to serve three main objectives, make up the largest portion of the budget of the Regional Policy directed at the Member States. In 1975, following the first enlargement, the main instrument of EU regional policy was established with the creation of the European Regional Development Fund (ERDF) which was meant to address the increased problem of regional imbalances. This came from the realization of the profound differences between the EC regions as a serious impediment to further integration²⁰⁸. In 1986, a common regional policy was created in the context of the Single Market project and had taken its rightful place in the Community treaties with the Single European Act. The reform of the Structural Funds – the ERDF together with the European Social Fund (ESF) and the European Agricultural Guarantee and Guidance Fund (EAGGF) - in 1988, established the main policy guidelines of EU regional policy. There is also the Financial Instrument for Fisheries Guidance (FIFG), which initially was not one of the structural funds, but is currently considered among them.

In the 1990s, EU regional policy continued to gain importance as it received the task to assist the less prosperous member states, the so-called cohesion countries, to meet the Maastricht convergence criteria while keeping economic development on track. The Cohesion Fund, intended to finance large-scale infrastructure, was created and total financial resources of EU regional policy were raised to the double of the previous amount²⁰⁹.

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²⁰⁸ Ansell et. al., (1997). "Dual Networks in European Regional Development Policy", *Journal of Common Market Studies*, Vol. 35(3), pp. 347-75.

²⁰⁹ Tondl, G., (2004). "EU regional policy experiences and future concerns", *Europa Institut Working Paper No:59*, Osterreich.

Cohesion Fund

The Cohesion Fund accompanies the Structural Funds, and was originally initiated to assist Member States to prepare for monetary union and was specially designed for the countries of Ireland, Greece, Spain and Portugal. Now it serves all those countries with a GDP less than 90% of the European average²¹⁰.

Although the Cohesion Fund is not explicitly concerned with regional policy, it is complementary to the Structural Funds. Unlike the Structural Funds, the Cohesion Fund does not fund programmes but is allocated to projects. It deals with two subjects, providing funds to major transport networks like railways, highways and bypasses, and to the environment, where it aims at projects contributing to the compliance with EU environmental law: waste water treatment, water management and waste management. It is obvious however, that the funding is directed to the promotion of end-of-pipe environmental technologies instead of preventative, innovative approaches²¹¹.

Pre-accession Aid:

In the light of the enlargement process, a set of instruments have been established with the aim of preparing the countries in Central and Eastern Europe for accession and facilitating their integration, often in terms of supporting and improving administration and the adoption of the community law, but also for investment schemes, building up infrastructure and even environmental development programmes; i.e. PHARE, ISPA and SAPPARD.

PHARE

The PHARE (Poland-Hungary Assistance in Restructuring their Economies) programme was originally designed for preparation of accession exclusively for Poland and Hungary. "". It has been designed to support investments leading to

²¹⁰ Mengi, A.,and Algan N., (2003). Küreselleşme ve Yerelleşme Çağında Bölgesel Sürdürülebilir Gelişme: AB ve Türkiye Örneği, Siyasal Kitabevi, Ankara.

²¹¹ Friends of Earth, (1999). *Billions for Sustainability: EU Regional Policy and Accession*, Uwe Nolte, Iserlohn.

the adoption and application of the EU law and to reinforce administrative and judicial capacity of the accession countries. 70% of the money is dedicated for investments and 30% for capacity building, institutional restructuring, etc.

ISPA

The ISPA (Instrument for Structural Policies for Pre-Accession Aid) is similar in scope to the Cohesion Fund and correspondingly provides 50% of the cost of transport and environmental infrastructure. Funds are given on a project basis where project budgets are a minimum of 5 million Euros in size.

SAPARD

The SAPARD (Special Action for Pre-Accession measures for Agriculture and Rural Development) addresses the agriculture and rural development sectors. They primarily cover support for improving the efficiency of farms, promoting quality products, vocational training, etc. SAPARD should also prepare the recipients for the EAGGF instrument of the Structural Funds once they are Member States

For the period between 2000 and 2006, 213 billion \in has been earmarked for all structural instruments for the 15 Member States. In addition, about 22 billion \in in pre-accession aid, and another 22 billion \in in structural interventions for the new Member States in the period 2004–06, will be spent within the EU's adjusted financial perspectives. The total of about 257 billion \in represents approximately 37 % of the EU budget for the period up to 2006^{212} .

Although the reformed regional policy only refers to three objectives, the six main objectives of the regional policy aimed at promoting the areas that are economically weaker remains:

1. Promoting the development and structural adjustment of regions whose development is lagging behind (e.g. new German provinces, some regions of Spain, Greece, Portugal and South of Italy)

²¹² http://europa.eu.int/comm/regional_policy (17/12/2005)

- 2. Conversion of the regions, frontier regions or parts of regions (including employment areas and urban communities) seriously affected by industrial decline.
- 3. Combating long-term unemployment and facilitating the integration into working life of young people and of persons exposed to exclusion from the labour market
- 4. Facilitating the adaptation of workers to industrial changes and to changes in production systems.
- 5. Promoting rural development
 - a. by speeding up the adjustment of agricultural structures in the framework of the reform of the common agricultural policy.
 - b. by facilitating the development and structural adjustment of rural areas.
- 6. Development and structural adjustment of regions with an extremely low population density (less than 8 or 10 persons per square km)²¹³.

The member states of the EU have to prepare regional and sectoral plans to benefit from the funds as per the objectives. There are 4 more mechanisms available for the local and regional administrations amounting to a total of around 5% of the overall structural funds budget:

- INTERREG III, which aims to stimulate cross-border, trans-national and inter-regional cooperation;
- LEADER+, which promotes rural development through the initiatives of local action groups;
- EQUAL, which provides for the development of new ways of combating all forms of discrimination and inequality as regards access to the labour market;
- URBAN II, which encourages the economic and social regeneration of towns, cities and suburbs in crisis²¹⁴.

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 $^{^{213}}$ Mengi and Algan, (2003). op. cit. pp. $186-187.\,$

²¹⁴ Ibid.

Even with such significant amounts flowing to the countries, the effectiveness of the regional policy in reducing the disparities have been questioned. While Boldrin and Canova, looking at a panel of regions for the period 1980-1996 concluded there was no supporting evidence that receiving Structural Funds has an effect on a region's growth²¹⁵, an opposite result is suggested by Cappelen et al. and Beugesdijk and Eijffinger²¹⁶.

Although the Gothenburg Council and the Cardiff process in essence, obliged the EU to follow sustainable development objectives in all policies, the actual implementation of the regional policy has not always been pro-environment. It is interesting to note that Regional Policy has become the most important policy for environmental spending of the Community. Between 1994 and 1999 almost 60% of all the EU finances directly dedicated for environmental purposes were committed through the regional policy. Large infrastructure projects were made possible by the use of structural funds, however environmental concerns were minimal as Friends of the Earth argue in its "Billions for Sustainability? EU Regional Policy and Accession" report of 1999. Most of the funding was provided in the forms of environment-related infrastructure, such as waste-water treatment plants, which might appear to be beneficial. However, strikingly, these types of interventions demonstrate a restorative approach instead of a preventive one, and appear as stand-alone measures instead of integrated ones, and are not in line with the basic principles of EU environmental policy. Also, the EU regional policy has been criticised as failing to integrate the environmental objectives with

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²¹⁵ Boldrin M., and Canova, F., (2001). "Europe's regions. Income disparities and regional policies", *Economic Policy*, Vol. 32, April 2001, pp. 206-248.

²¹⁶ Cappelen et al. (2001). "The impact of regional support on growth and convergence in the European Union", paper presented at the European Meeting on Applied and Evolutionary Economics, Vienna September 2001.

²¹⁷ Beugesdijk, M. and Eijffinger, S., (2003). "The effectiveness of structural policy in the European Union: An empirical Analysis for the EU 15 during the period 1995-2001", Tilburg, Tilburg University Center.

development concerns, mostly due to project-level planning instead of a regional focus in terms of environmental effects²¹⁸.

It is safe to say, in light of the observations, that the EU is moving towards sustainability at a slow pace, and the effects of the slow changes will only be revealed in time

4.2 Policies at the International Level

The EU has a profound development policy, with the goal of encouraging sustainable development that helps to eradicate poverty in developing countries and integrating these countries into the global economy. In addition to these economic and social objectives, there is a political plan: to help reinforce democracy and the rule of law, whilst promoting respect for human rights and basic freedoms²¹⁹. This section will also focus on the EU and the WSSD process and how the EU and the international developments in the sustainable development arena influence each other.

4.2.1 Development Policy

The EU constitutes the largest source of Official Development Assistance (ODA) worldwide. European development policy in the narrower sense therefore only refers to inputs administered and devised by the European Commission, amounting to about 11 per cent of overall international ODA.

The basic principles of EU development policy is established in Article 130, EC Treaty:

- Complementarity: The EU's development policy shall be complementary to the policies pursued by the member states.
- Coordination: Article 130 (X) of the Maastricht Treaty explicitly requests the member states to coordinate their policies on development.

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²¹⁸ Friends of Earth, (1999). op. cit. pg. 6

²¹⁹ http://europa.eu.int/scadplus/leg/en/lyb/r12000.htm (17/12/2005)

• Coherence: Article 130 (V) obliges the EU to take account of the political objectives of development cooperation in all decisions, which affect developing countries²²⁰.

The EU's development policy is directed to African – Caribbean – Pacific (ACP) countries, Central and Eastern European countries as well as the former Soviet States (countries in transition to market economy), Mediterranean countries, Asian countries and Latin American countries. Below, using the example of ACP countries, will be an attempt to analyse the content and relevance of the development policy to poverty alleviation and environmental conservation.

The Cotonou Agreement (2000) between the EU and the ACP made any assistance from the European Development Fund conditional on the implementation of basic human rights, democratic principles and good governance. According to EU terminology, the latter refers especially to the rule of law and to measures taken against corruption, which is common in many of the countries that the development policy has targeted²²¹.

The EU's development policy was severely criticised by the Development Assistance Committee of the OECD demonstrating administrative weaknesses and friction in the EU Commission's development policy decision- making process, highlighting the failure to fulfil the principles of coordination and coherence²²². In light of the criticisms, it is safe to say, while Article 19 of the Cotonou Agreement establishes the reduction of poverty as a central objective of ACP-EC cooperation, to fulfil this objective, EU will need to make considerable changes in the operation of its development policy. Several studies and evaluations produced by the DAC and by NGO networks have shown that the EU performs badly in

²²⁰ WBGU, (2005). op. cit. pg. 174

²²¹ VENRO-Project "Prospects for 2015 – Combating Poverty Requires Involvement", (2002). "Development Needs Financing – How Financing for Development Can Contribute to Reaching the 2015 Goals", in *2015 in Dialogue, No. 2*.

²²² OECD (Organization for Economic Co-operation and Development)/Development Assistance Committee (DAC) (2002). *Poverty Environment Gender Linkages*, OECD, Paris.

comparison with many bilateral donors with regard to investment in basic social services²²³. In another evaluation, conducted by Alliance 2015, an affiliation of European NGOs, a harsh verdict on the question of the EU's contribution to the achievement of the MDGs was given: "There is a large discrepancy between policy and implementation, between theory and reality, between rhetoric and results"²²⁴. Although the criticism expressed in the report is supported by statistics that differ considerably from those used by the DAC, it confirms the low social priority of EU assistance.

Sustainable development is therefore defined as a cross-sector task and is placed high up on the development policy agenda of the EU; evidences to this can be easily found in Cotonou Agreement as well as the participation of EC in the evaluation of the policy paper on "Linking poverty reduction and environmental management" presented to the WSSD by several international development organizations. The EU has been a supporter of the "international consensus on the links between poverty and the environment... Better environmental management is therefore essential to long-term poverty reduction". However, the EU Commission itself draws the following conclusion that implementation of this realisation was far from satisfactory: "A review of 60 Country Strategy Papers undertaken in 2002 highlights the fact that environmental issues are not yet consistently addressed" ²²⁵.

European development policy's lack of success and the inefficiency of the EDF have been widely criticised, especially by the European Parliament and NGOs. In particular, criticism was directed at the marginal focus on poverty of EDF projects and insufficient coherence between trade, environment and development policy.

²²³ Verband Entwicklungspolitik deutscher Nichtregierungsorganisationen (VENRO) *Globale Armut – Europas Verantwortung*, Bonn as cited in WBGU, (2005). pg. 177.

²²⁴ Alliance 2015, (2004). *The EU's Contribution to the Millennium Development Goals*. Alliance 2015, Den Haag.

Annual report 2001 on the EC development policy and the implementation of the external assistance COM(2002) 490, (2002). http://europa.eu.int/comm/europeaid/reports/aidco 2001 big annual report en.pdf (19/12/2005)

To claim a guiding role in the sphere of environmental and development policy, the EU has to overcome the contradictions to its own principle of coherence. The EU's success in overcoming its widely criticised lack of efficiency in development cooperation will depend largely on reform of its own decision-making and administrative structures, and on the 25 member states' willingness to concede it more competence in coordinating development policies for individual countries. Being the largest source of ODA, the EU has considerable weight in international development policy and a great responsibility to include a better focus on poverty and ecology.

4.2.2 EU and World Summit on Sustainable Development

The EU has demonstrated its commitment towards sustainable development with the Gothenburg strategy adopted in 2001, prior to the WSSD. The EU has taken up a leading role before, during and after the WSSD. The EU has a clear motive in taking up a leadership role, both due to a strategic interest in shaping the norm of the sustainable development in global policy terms and to ensure that action is taken via multilateral agreements to prevent damage to the Union's economic competitiveness. The size of the EU economy makes it susceptible to disruption that can be induced by the domination of the international sustainability discourse by a wrong model. EU had and has a clear interest in shaping the process and mirror its definition of sustainability and sustainable development in international agreements.

The EU was granted "full participant status" in Rio, which gave it same rights as the participating states and also signing of the outcomes of the summits like WSSD along with individual member states. The Community now is a signatory of around 60 multilateral environmental agreements²²⁶. Under mixed competencies (the EU and the member states share competencies) and areas of limited competencies, the EU presidency assumes a leading or coordinating role. During the WSSD, the Commission negotiated on all areas of exclusive

²²⁶ Vogler (2005). op. cit. pg. 839

competence (i.e. trade and agriculture) and the Council Presidency expressed common position on areas of mixed competence.

WSSD was designed to review the progress made towards sustainable development at the Rio Conference. The WSSD also had the ulterior motive of examining some of the commitments made at Rio Conference, such as the US approach of attacking the precautionary principle.

The Commission, in its position paper as part of the preparations to the WSSD, suggested four strategic objectives that the EU should seek to obtain through the WSSD:

- "increased global equity and an effective partnership for sustainable development;
- better integration and coherence at the international level;
- adoption of environment and development targets to revitalise and sharpen the political commitment; and,
- more effective action at national level, and international monitoring²²⁷".

Also, in a later communication, complementing the one above, the Commission added the external dimension to the sustainable development strategy, responding to the criticisms²²⁸. These two communications formed the EU position at the WSSD.

The WSSD reaffirmed the commitment of the parties, particularly the EU on sustainable development. The EU with its sustainable development strategy in place and the addition of the environmental dimension to economic and social policy objectives, was on the right track, however, it was criticised of being

²²⁷ Communication from the Commission to the Council and European Parliament, COM(2001)

^{53, (2001). &}quot;Ten Years After Rio: Preparing for the WSSD in 2002". http://europa.eu.int/eurlex/en/com/cnc/2001/com2001 0053en01.pdf (18/12/2005)

²²⁸ Communication from the Commission to the Council, the EP, the European Economic and Social Committee and the Committee of the Regions, COM(2002) 82, (2002). "Towards a Global Partnership for Sustainable Development". http://europa.eu.int/eurlex/en/com/cnc/2002/com2002 0082en01.pdf (18/12/2005)

ineffective in implementation. Similar to the situation in nation states, within the EU, sustainable development still is believed to be the business of only those that deal with development and environment. While Directorate Generals (DGs) Environment and Development are working considerably hard on the issue, their power within the Commission is relatively limited²²⁹. Other DGs such as DG Trade is still favouring free market liberalism over sustainable development²³⁰ and DG Agriculture is not fully sharing the sustainable development norm²³¹.

The Johannesburg Implementation Plan was the outcome of the WSSD setting concrete objectives in thematic areas, very similar and in line with the MDGs, which can be used as a tool for achieving the objectives as well as a tool for monitoring progress. In the plan, the UN Economic Commission for Europe (UNECE) has recognised that it has a major role to play and responsibilities in global efforts to achieve sustainable development by concrete actions in the UNECE region. UNECE in furtherance of the region's commitment has also committed itself to tackle the issue at regional, sub-regional and trans-regional levels, working closely with the EU²³².

The revised EU sustainable development strategy also focuses on the priority objectives identified in the EU contribution to the WSSD. These are harnessing globalisation, trade for sustainable development, fighting poverty, social development, sustainable management of natural and environmental resources, improving the coherence of European Union policies, better governance at all levels and financing sustainable development. In its recent Declaration on Guiding Principles for Sustainable Development the EU also underlines the need

²²⁹ Jordan, A., (1999). "Editorial Introduction: The Construction of a Multilevel Environmental Governance System", *Environment and Planning C: Government and Policy*, Vol. 17, No.1, pp. 1-17.

²³⁰ Rosamond, B. (2000). *Theories of European integration*, Palgrave, London.

Weale, A. (1996). "Environmental Rules and Rule-Making in the European Union", *JEPP*, Vol. 3, No. 4, pp. 594-611.

²³² Johannesburg Implementation Plan, (2002). http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm (18/12/2005)

for ensuring the Union's internal and external policies are consistent with global sustainable development and its international commitments²³³.

4.3 Enlargement and Poverty-Environment Nexus

The analysis until now has demonstrated that the EU, only recently started the actual attempts to fulfil requirements of a sustainable development approach, despite having had the concept in its overall policies for a while. This section will try to analyse the enlargement realities and whether this latest wave would or should trigger any changes in the overall policies of the union.

The latest enlargement of the EU with the 10 new members in 2004, demonstrates several challenges both for the EU and for the countries that have become the new Member States. Among these, relevant to this analysis comes poverty, environment, sustainable development and regional policy. In analysing the consequences of enlargement, two different perspectives can be considered: the poverty aspect and the environmental aspect; certainly including the sustainable development dimensions of the policy, the all-encompassing policy to cover for the interactions between the two in a European context.

From the poverty perspective, first of all, the latest enlargement brought into the union a new set of countries with diverse economic situations.

The European regional development policy until 1997 neglected the then "accession" countries. Even then, in 1997, there was concern among the Commission members, that the transfer of funds to new members (even following accession) might jeopardise the prospering regions as the redistribution would, inadvertently cause funds to be diverted from better performing regions to backward regions²³⁴. However, this approach of the Commission members was

²³⁴ Brusis, M., (2002), "Between EU Requirements, Competitive Politics, and National Traditions: Recasting Regions in the Accession Countries of Central and Eastern Europe, *Governance*, Vol.15 (4), pp.53 1-559.

²³³ Presidency Conclusions of the Brussels European Council 16-17 June, (2005), http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/ec/85349.pdf (11/12/2005)

not reflected in the Agenda 2000, a political agreement at the Berlin European Council in 1999. It aimed to strengthen the Community policies and to give the European Union a new financial framework for the period 2000-06 with a view to enlargement. The Commission, with Agenda 2000, reinforced the principle that by adopting the whole legislative framework of the EU, *acquis communautaire*, the acceding states also become entitled to all rights and obligations of being an EU member state, thus could not and should not be excluded from the funds aimed at eliminating regional disparities.

Although GDP per capita is not "the measure" reflecting regional disparities, in itself, it still gives a relatively good picture of the economical differences within the EU in Figure 8. The figure demonstrates the relative differences of each country with respect to EU 15 and EU 25 (Eurostat) and to each other in terms of the GDP clearly and shows that all the new members have a GDP in average much lower than the EU- 15 and the EU-25 levels. The figure also demonstrates the profound differences in GDP levels even among the new member states, although it does not show the relative differences among regions within the member states, old and new.

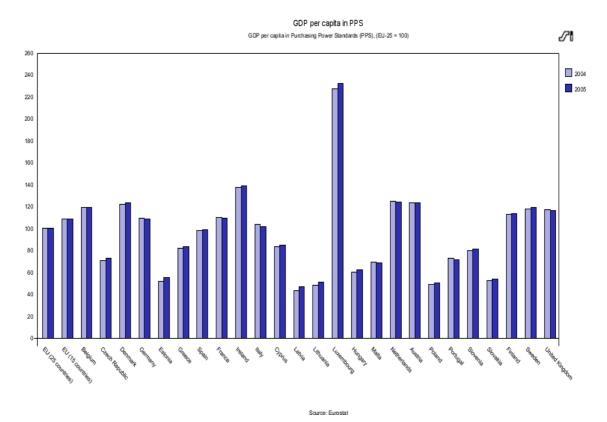


Figure 8. GDP per capita for the EU in 2004 and 2005²³⁵ Source: Eurostrat Data Sets (2005)

The economic situation in the new member states results in most of their regions to qualify for cohesion funds, and their inclusion in the EU, with its remarkable decreasing effect on the average GDP (around 10% decrease), puts many of the former regions receiving the funds out of the existing criteria²³⁶ (Figure 8).

Although the new members will be eligible for EU regional policy, with the EU membership, they lost eligibility for other funds directed at developing countries. Moreover, as a member of the EU, they have to comply with the Union's ODA requirements. Having fragile economies, with much lower GDP levels compared to the former members, the future of ODA does not look bright. Of course, the transition to donor from recipient is a tough one and requires intricate planning and re-allocation and a re-distribution of resources, financial and otherwise.

²³⁶ Begg, I., (2003), "Complementing EMU: rethinking cohesion policy", *Oxford Review of Economic Policy*, Vol. 19(1), pp. 161-79.

²³⁵ Eurostat Data, 2005.

Unfortunately, it is now not possible to see the effects of changes in ODA, both at the proposed and at the realised levels. The latest OECD figures for ODA, shows a welcome dramatic increase in 2004, a 5.9% increase in real terms compared to 2003. However, this figure is calculated for the EU-15 and does not include the new members. Only when the 2005 figures are released it will be possible to see the impact of enlargement on ODA targets.

The EU's ODA target of 0.33 percent of Gross National Income (GNI) by 2006, is far higher than what some of the new Member States set aside currently (ranging from 0.01 to 0.1). Moreover, only three (Estonia, Malta and Poland) of the 10 new members, list poverty reduction as an objective for ODA.

The September 2005 Presidency conclusions of the European Council confirms this increase in the ODA, which is very close to the internationally agreed ODA target of the Member States, the 0.39 % target of GNI in 2006²³⁷. In that same document, the Council has agreed on a new collective European Union target of an ODA/GNI ratio of 0.56 % by 2010, which would result in an additional EUR 20 billion a year in ODA. With regard to ODA, each EU Member State is expected to reach 0.7% with an intermediary target of 0.39% by 2006, by which time the individual Member State should reach the target of at least 0.33%.

In the EC Communication, "Accelerating progress towards achieving the Millennium Development Goals financing for development and aid effectiveness", the EC proposes:

-For EU15: individual target of 0.51% by 2010, with the aim of reaching 0.7% by 2015;

-For EU 10 (new EU Member States) individual target of 0.17% of 0.33% in 2015.

²³⁷Preparation for the September 2005 United Nations Summit, (2005). Bulletin EU 6-2005 (7/23) http://europa.eu.int/abc/doc/off/bull/en/200506/i1008.htm (13/12/2005)

-For EU25: collective average of 0.56% by 2010²³⁸.

Table 1: Proposal for new EU ODA Targets for 2006 – 2010 Source: Communication from the European Commission (COM(2005) 133, 2005)

		2006		2010	GAP 201	0-2015
	ODA	%GNI	ODA	%GNI	ODA	%GNI
	m euro	700111	m euro	700111	m euro	700111
Austria	813,50544	0,33	1360,8723	0,51	538,234	46 0,19
Belgium	1567,99	0,5	2376,1399		,	0 0
Cyprus	2,7733008	0,02			25,49520	02 0,16
Czech Republik	124,92917	0,133			,	0
Denmark	1716,3469	0,82				0 0
Estonia	1,9631515	0,02	18,062316	0,17	18,04742	27 0,16
Finland	671,90088	0,42	1212,1452	0,7		0 0
France	8283,8971	0,47		0,64	1215,233	0,06
Germany	7565,3309	0,33	12655,661	0,51	5005,403	34 0,19
Greece	616,45089	0,33	1031,2297	0,51	407,858	61 0,19
Hungary	26,487151	0,03	162,46642	0,17	162,332	25 0,16
Ireland	855,82207	0,61	1063,0468	0,7		0 0
Italy	4794,8617	0,33	8021,083	0,51	3172,39	49 0,19
Latvia	5,1893117	0,037	25,808196	0,17	25,78692	
Lithuania	14,414532	0,07	40,121366	0,18	35,4948	44 0,15
Luxembourg	223,2018	0,9	241,60081	0,9		0 0
Malta	8,7966102	0,18	9,5217337	0,18	8,423752	24 0,15
The Netherlands	3946,952	0,8	4272,3078	0,8		0 0
Poland	227,12154	0,1	417,93422	0,17	417,589	72 0,16
Portugal	479,03064	0,33	801,34626	0,51	316,93	81 0,19
Slovak Republic	33,185133	0,092	66,375124	0,17	66,3204	12 0,16
Slovenia	29,316122	0,1	53,945612	0,17	53,90114	45 0,16
Spain	3288,2821	0,37	5194,7158	0,54	1634,02	55 0,16
Sweden	2818,7209	1	3051,0742	1		0 0
UK	8145,7779	0,42	10706,663	0,51	4234,560	0,19
	_		_		<u> </u>	
EU 15 TOTAL	45788,071	0,43%	65987,798	0,58%	24053,	57 0,12%
EU 10 Total	474,17602	0,09%	992,59821	0,17%	1128	3,8 0,16%
EU 25 TOTAL	46262,247	0,42%	66980,396	0,56%	2513	82 0,14%

Table 1 clearly demonstrates the current ODA projections of the new Member States and their targets for 2010. Some of the countries, like Slovenia, Lithuania and Poland will have to increase the share of ODA as high as twice as much, while countries like Cyprus, Estonia and Hungary have bigger challenges as their ODA targets for 2010 are between 6 to 8 times their 2006 projections. This is going to be among the biggest challenges in front of the new members.

²³⁸ Communication from the European Commission, COM(2005) 133, (2005). "Accelerating progress towards achieving the Millennium Development Goals financing for development and aid effectiveness".

http://europa.eu.int/comm/development/body/communications/docs/communication_133_en.pdf (15/12/2005)

On the environmental side, enlargement also implied fearsome consequences. The new members environment was characterised by several problems and the accession to EU was a welcome fresh breath of air for the environmental NGOs, as the adoption of the *acquis communautaire* implied more environmental consciousness, whether wanted or not by the governments in question²³⁹. Pavlinek and Pickles express that by the late 1980s, large areas of the region has suffered from excessive air pollution, water pollution and land degradation, particularly in the former East Germany, the Czech Republic and Poland. Conversely however, the new coming countries, despite having highly degraded environmental areas, also bore many environmental "hot spots²⁴⁰". To the "developed" Europe, that has lost most of its natural environments, these areas are very important. Former Environment Commissioner Margot Wallström stated:

"The accession countries are facing a considerable challenge to catch up with EU environmental policy, but they have also an important contribution to EU environmental policies ... The two environmental contributions that we most often mention when talking about the accession countries are their rich natural heritage – high biodiversity and vast areas of comparative wilderness – and their innovative use of economic instruments ²⁴¹."

The new members, soon after the collapse of communist systems, applied for EU membership and started taking drastic actions attempting to solve their environmental problems. Although important changes in environmental regulation and management occurred in the decade of the 1990s and that the

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²³⁹ Pavlinek, P and Pickles, J., (2004). "Environmental Pasts/Environmental Futures in Post-Socialist Europe", *Environmental Politics*, Vol.13, No.1, Spring 2004, pp. 237–265.

²⁴⁰ Hot Spots: geographically defined watershed, coastal areas and other areas of the sea, of national, regional and/or global significance, where the conditions are such as to adversely affect human health, threaten ecosystem functioning, reduce biodiversity and/or compromise resources and amenities of economic importance in a manner that would appear to warrant priority management attention.

²⁴¹ Wallström, M., (2000). "Speech to the Environment Committee of the European Parliament", Public Hearing on Enlargement, as cited in Schreurs, M., (2003). "Environmental Protection in an Expanding European Community: Lessons from Past Accessions", *Environmental Politics*, Vol.13, No. 1, pp. 27–51.

overall quality of the environment improved, the new member states main approach was a passive compliance, rather than a pro-active approach²⁴². The authors argued that the new members will continue with their reluctance towards environmental measures, and would try to block or press for lower standards, however they may not influence the policy decisions, hence get stuck with environmental requirements of higher standards.

Nonetheless, Carmin and Vandeveer argue that implementation "challenges" are not only seen in the new member states, in fact, many of the new member states have achieved significant policy changes in relatively short periods of time – and at lower costs, supporting Wallström's words²⁴³.

The problem about enlargement is not the non-compliance, but the scope and type of problems in these countries. However we cannot say that the EU-15 performed well on the same fronts, particularly the southern countries²⁴⁴. The Commission agreed to these findings in its review of the Cardiff Process in 2004. The main findings of the report was that although in some sectors, environmental concerns brought concrete improvements, there was a general lack of consistency, the need to strengthen political commitment and to improve delivery, implementation and control mechanisms, a need of clearer focus and priorities and the need to adopt a strategic approach²⁴⁵.

Is EU sustainable? The Eurostat Report, Measuring Progress Towards a Sustainable Europe (1990 – 2005) claims that EU cannot yet be considered

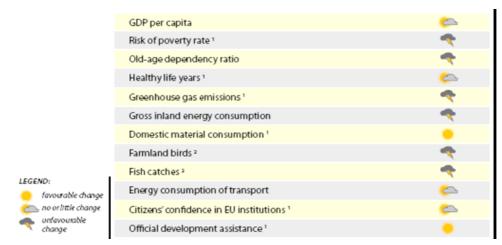
²⁴² Jehlicka, P and Tickle T, (2004). "Environmental Implications of Eastern Enlargement: The End of Progressive EU Environmental Policy?", Environmental Politics, Vol.13, No.1, Spring 2004, pp. 77-95.

²⁴³ Carmin J, and Vandeveer S.D., (2004). "Enlarging EU Environments: Central and Eastern Europe from Transition to Accession", Environmental Politics, Vol.13, No.1, Spring 2004, pp. 3-

²⁴⁴ Schreurs, M., (2003). "Divergent Paths. Environmental Policy in Germany, the United States, and Japan", Environment, Vol.45, No. 8, pp. 8-17.

²⁴⁵ Commission Working Document, COM(2004)394, (2004). "Integrating Environmental Considerations in other policy areas – a stocktaking of the Cardiff Process" http://europa.eu.int/comm/environment/integration/com2004394 en.pdf (17/12/2005)

sustainable, or even heading towards sustainability. Very few targets set in the EU sustainable development strategy in 2001 are within reach.



¹ The Evaluation is based on data from EU-15.

Figure 9. EU's Progress Towards Sustainability²⁴⁶

Source: Measuring Progress Towards a More Sustainable Europe. (Eurostat, 2005)

In most of the headings, the situation; either went from bad to worse or whatever change observed was marginal. The EU within its boundaries should continue trying harder to achieve sustainable development. Internal mechanisms of ensuring compliance and progress must be installed and enforced. This would also bring the EU the element of consistency it currently lacks in terms of the dualistic approach of advocating the sustainable development issue both internally and internationally, but only pursing its achievement with its development policy and/or accession.

05-551/EN/KS-68-05-551-EN.PDF (19/12/2005)

² The EU15/EU25 distinction is not applicable. (Eurostat, 2005)

²⁴⁶ Summary of findings of Eurostat Report on EU's Progress Towards Sustainability (Eurostat, (2005). *Measuring Progress Towards a More Sustainable Europe – Sustainable Development Indicators for the European Union Data 1990 – 2005*, Office for the Official Publications of the European Communities, Luxembourg.) https://epp.eurostat.cec.eu.int/cache/ITY_OFFPUB/KS-68-

CHAPTER V

CONCLUSION

The issue of poverty is complex in nature, both due to its reasons and the consequences and eventual solutions it may entail. Similarly, environmental problems are often very complex issues, usually requiring response from several different disciplines and an integrated approach for their solutions. National governments and international actors had the two issues on their agendas at least for the last 40 - 50 years. Poverty alleviation and elimination of inequalities among humankind, as well as preventing environmental degradation has also been among major concerns of international organisations within the UN family and the EU.

Building on the academic debate on poverty definitions and measurements, international development actors have reached the consensus that only measuring the income levels is not sufficient to determine the degree of deprivation of individuals within a community. It is generally accepted that poverty can be identified with exclusion from social life, having limited or no access to basic health and educational services, lack of access to clean and safe water, air and a "liveable" environment, as well as lack of freedom of choice and participation to decision making processes.

One of the most important factors relating to poverty is its direct and indirect relations with environmental degradation. Environmental degradation is identified as one of the causes and a serious effect in aggravated levels of poverty. Conservationists and developmentalists have realised that the solution to both problems need to go hand in hand, and had started increasingly being involved in integrated projects that aim to tackle both issues simultaneously. This trend is

also reflected in the approaches of international organisations and the EU with an objective to achieve sustainable development targets.

Although most of the international actors are still predominantly focusing on the alleviation of absolute (income) poverty, as the worst form of the problem, the slow but definite shift in their approach towards combating poverty from the use of monetary instruments and methods towards more comprehensive ones that take into account other factors is promising. The new mechanisms used by the international actors include aspects such as improving empowerment, decreasing social exclusion and focusing on the lack of or insecurity of environmental entitlements.

International organisations and the European Union took the leading role in the formation and shaping of the international discourse on sustainable development, the development concept that considers the depletability of the resources, which, according to the Brundtland report, is the "only" solution to address the poverty-environment nexus.

"...our global future depends upon sustainable development. It depends upon our willingness and ability to dedicate our intelligence, ingenuity and adaptability – and our energy – to our common future. This is a choice we can make (Brundtland Report, 1987)."

Sustainable development might be a way out, but whether it is adequately responding to continuously deteoriating environmental conditions and has the potential to reverse the destructive consequences of economic policies is questioned. It would be sensible not to rely on a concept as a key to solve all the corresponding problems at once without analysing what has been accomplished since its introduction.

Poverty is inherent in all of the existing political and economic systems. It can also be argued that poverty, in essence, cannot be eliminated without radically

altering the current production and consumption patterns, the economic and political power distribution and the market relations of the existing mechanisms.

International entities such as the World Bank, CSD, UNDP, GEF, OECD and UNEP had the poverty-environment interactions on their agendas. These institutions, with their varying levels of commitment towards the povertyenvironment nexus, have different approaches. While UNEP, CSD and GEF were promoting environmental conservation and sustainable development; others such as the World Bank were promoting economical growth to start, although this attitude of the WB has changed due to severe criticisms. Other institutions were also criticised, mainly for being ineffective both regarding the establishment of integrated and coherent policies and in terms of converting the policies into actions within their domains. The Millennium Development Goals united the whole UN system and other international organisations under time bound and quantifiable goals, which are monitored through a number of targets and MDGs brought poverty, environmental sustainability, education, indicators. gender equality, child mortality, maternal health, combating HIV/AIDS and developing a global partnership for development to the centre of the UN agenda and with the high level political commitment, the MDGs became an important tool for the achievement of sustainable development objectives at the global level.

The EU has been presumed to be effective with its response towards poverty-environment nexus. However, the policies developed by EU were greatly shaped by the perception of policy makers, which could hardly realise the severity of the interrelations between these two phenomena. The EU, until recently, has not considered poverty alleviation within the content of its internal environment or sustainable development policies. The EU Member States, traditionally responded to poverty with a social exclusion perspective and mainly within the context of the social policy (the welfare systems) or the regional policy (aiming at reducing regional disparities). It has been observed that the environmental concerns, only recently became an integral part of the said two policies and the

two policies also recently started having important implications for the environmental policy towards sustainability.

The EU until the last wave of enlargement, had minimal number of people living in extreme poverty conditions under fragile environments, and the utilisation of social policy and the regional policy had been, for the most part, assumed to be sufficient.

The EU, in fact, is among the most successful international entities, particularly within its borders, regarding the elimination of regional disparities. However, the EU can also be criticised on the grounds that its actions were mainly targeted to protect the interests of the member states. The overall effect of the EU interventions has not resulted in a decrease in the disparities at the global level, including their cross-border cooperation and development aid.

The scope of the analysis of this study was not extensive to include the practical implementation or the enforcement of the decisions taken at the policy level. It is the presumption of this analysis that, the reflection of the policies regarding poverty alleviation and environmental degradation into decisive actions was limited and disconcerting. In other words incorporation of the sustainable development concept and its integration into other policy areas has been committed to a great extent but translation of these policy targets into practice remains behind maybe because of unsatisfactory implementation and enforcement mechanisms. This has not only been a concern regarding the latest wave of EU enlargement. In fact, many of the new member states have achieved significant policy changes in relatively short periods of time – and at lower costs, while former member states also have been suffering from implementation "challenges". It is however, important to underline that these new member states are still in the infancy phase regarding their EU membership and implementation challenges may be yet to appear.

The implementation challenges and the discrepancies in the levels of compliance among the EU members, particularly regarding environmental issues, raises an important question regarding the suitability of the methodology used in the EU's policy making vs. implementation.

It is the responsibility of the member state to comply with the rules and regulations, while the EU is responsible from the monitoring of compliance of the members to be able to fulfil its commitments at the Community level. Member states, regardless of their willingness or ownership of the concept or the specific requirements, are expected to fulfil the usually very strict requirements of the EU. However, without the political support of the nation state or the ownership, most of these policies, although reflected in the national legislation, end of being "one foot in the grave".

Turkish experience in environmental policies is extensively inspired from developments at international level, which were shaped in line with the principle of sustainable development. In relation to Turkey's position with regard to EU in the context of poverty-environment problematique there is a long road to take. While EU has been mainly focusing on the high policy issues for decades, Turkey will be expected to fulfil its obligations with regard to adaptation of the standards of aquis communitaire in the field of environment in the coming future. Turkey engaged herself in a variety of multinational environmental instruments and as well as expressed commitment in relation to harmonisation with the EU system specifically in the last decade. The accession negotiations with Turkey are yet to begin and one of the negotiation baskets is confined to environment marked by the perspective of sustainable development. Turkey started to integrate environmental dimension in a variety of sectoral policy areas through development plans and legislative measures. The overall achievement recorded in the field of environment in Turkey will be beneficial during the negotiation process but there will also be tumbling blocks before both of the parties in the achievement of targets identified with sustainable development. The terminology change observed in the last 5-year development plan representing a shift from "sustainable development" to "sustainable growth" might be one of the possible conceptual constraints, necessitating a re-evaluation in line with the Turkey's interests to seek for an optimum balance between development priorities and environmental requisites.

While this study strived to provide an overall approach of the EU regarding poverty – environment interactions, further investigation would be beneficial to demonstrate the diversity of policies developed by the EU, towards its members and towards other countries with respect to poverty alleviation basing the study on empirical data on the implementation challenges due.

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