The ambiguities of sustainable development and conflicts within environmental governance in Central America: the case of the Mesoamerican biological corridor

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The Ambiguities of Sustainable Development and Conflicts Within Environmental Governance in Central America: The Case of the Mesoamerican Biological Corridor.

By

Chloe J. Hill

Submitted in partial fulfilment of the requirements for the reward of Doctor of Philosophy of Loughborough University.

March 2007

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Abstract

This thesis is an exploration of the debates surrounding the concept of sustainable development. Specifically it examines the ways in which the concept has been defined and adopted within environmental governance in Central America.

The concept of sustainable development is intended to provide a framework for decision-makers and planners working on environment and development issues. However, sustainable development is commonly poorly defined and so broad in scope in most policy documents that it has become a highly ambiguous concept. This lack of clarity has led to different actors operating within the environment/development arena interpreting it in a multitude of different ways. Such ambiguities in how the concept can be and is interpreted by such actors have led to conflicts over how sustainability can be achieved. This thesis demonstrates the manifestation of such ambiguities and how these then impact upon environmental governance and the direction of sustainability initiatives.

The ambiguities associated with the concepts of sustainable development adopted by actors within Central America are demonstrated through an exploration of the relationships amongst, and impacts of, three concurrent regional initiatives which all strive towards achieving ‘sustainable development'; the Mesoamerican Biological Corridor, the Plan Puebla Panama and the Dominican-Republic Free Trade Agreement. Through exploring the nature of these three initiatives, the thesis reveals how a neoliberal interpretation of sustainable development has become the dominant discourse that is serving to influence their direction. It is also demonstrated that neoliberal ideologies have not only permeated and influenced the environment/development agenda at the regional level but also at the national and local levels within the Central American region.

With the neoliberal discourse dominating sustainability agendas within regions of the world such as Central America, this research shows how the concept of sustainable development by no means offers a clearly defined policy agenda. The thesis concludes by questioning the future viability of the concept as a whole and whether or not the term can continue to be used as a reference frame for decision makers.
Acknowledgements

I like writing acknowledgements; to me it means I’m at the end of something. Indeed I’m at the end of a very long, hard and an all-together life changing journey and there are so many people that have helped me arrive at this point. It is these people who have been an invaluable part of my learning process and who have not only given me intellectual guidance and inspiration but have also kept my spirits high in times of disillusion.

In particular, I would like to thank my supervisors, Dr Ed Brown and Dr Jo Bullard; my guardians throughout the whole of my research progression and who have seen my work evolve in a way that nobody else has. I am completely indebted to them as without their help, input and their huge amount of faith in me, I would not have come this far today. I will miss our meetings together.

On a personal level, I would first of all like to thank my mother Vicky for being such a rock for me to stand on and who has had to suffer the PhD rollercoaster with her daughter. She has seen all the tears, joy and happiness that come with such a steep learning curve and I thank her, and my stepfather, Bill, for all their love and encouragement. My father Tony, although I don’t think he has ever quite understood what I have been researching these last three years and what I was doing ‘the other side of the world’, he has accepted me for what I try to do in this life. I would like to say a special thank you to all my friends who have offered me their kindness and support over these years, and who have on occasion managed to drag me away from my work to offer me some light entertainment. In particular I would like to thank my friends in Costa Rica; Bonnie, Matt, Ivi, Will, Lau, Alberto and Eugenia and my friends in Nicaragua; Helen, Herberto, Jeanie and Melanie, and my travelling partner Al; your friendships were like a tonic for me. I thank you for sharing with me your time and your secrets and opening up your hearts and homes to me.

On an academic note, I would like to thank Dr Carlos Granados for providing me with an initial base at the University of Costa Rica, San José as well as pointing me in the right direction for valuable interview contacts on my arrival. I would also like to extend a special thank you to some of my friends mentioned above who helped me with my Spanish especially in document and interview translation. In particular Ivania Carmona González and Lauren Morin who have contributed so much towards my research by helping me translate more interview scripts and Spanish documents than I would like to imagine. Their moral support and engagement in my research topic has been extremely thought provoking and inspiring. Gracias por todo chicas. In Nicaragua I would also like to thank John Perry for providing me with a very comfortable roof over my head for my first week and being valuable contact throughout my stay in the country. On home ground, I would like to say a special thank you for the support of the Leicester Masaya Link Group and especially Claire Plumb who have shown a huge amount of interest in my work; I thank you for your encouragement. I would also like to
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Lastly and by no means least, I would like to thank all those people who participated in my interviews whilst out in the field. There were many words spoken that have had such a profound impact on me and they are words that have changed my perspective on life forever.
Quisiera dedicar mi tesis a la gente de Centroamérica que se preocupa por cuidar el ambiente, por su cultura y que lucha por hacer cambios en este mundo.

I would like to dedicate my thesis to those people of Central America who care for their environment and their culture and who strive to make a difference in this world.
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Acronyms

ACERCA  Action for Community and Ecology in the Regions of Central America
ACICAFOC  Central American Indigenous and Campesino Community Agroforestry
ACOSA  Osa Conservation Area in Costa Rica
ALADI  Latin American Association of Integrations
ALIDES  Central American Alliance for Sustainable Development
BCIE/ CABEI  Central American Integration Bank
BECOL  Belize Electricity Company Limited
BOCOSA  Management and Conservation project of Forests on the Osa Peninsula
BWI  Bretton Woods Institution
CACM  Central American Common Market
CAF  Andean Development Corporation
CAFS  Central American Forest Strategy
CATIE  Tropical Agronomy Centre of Teaching and Research
CABEI  Central American Bank for Economic Integration
CBA  Atlantic Biological Corridor
CBC  Community Based Conservation
CBD  Convention on Biological Diversity
CCAD  Central American Environment and Development Commission
CCC  Caribbean Conservation Corporation
CEDARENA  Centre of Environmental Law
CEPREDENAC  Coordination Centre for the Prevention of Natural Disasters in Central America
CIEPAC  Economic and Political Investigations Centre of Community Action
CINN  Interoceanic Canal Of Nicaragua
COABIO  Advisory Commission on Biodiversity
COECO-La Ceiba  Environmental NGO Costa Rica
COMAP  Co-management of Protected Areas Project
COMEX  Ministry of Commerce Costa Rica
COABIO  Advisory Commission on Biodiversity
CONABIO  National Commission for the Knowledge and Use of Biodiversity (MEXICO)
CORECA  Agricultural Regional Cooperation Council
COTERC  Canadian Organisation for Tropical Education and Rainforest Conservation
CRUSA  Costa Rica- United States of America Foundation of Cooperation
DANIDA  Danish Development Agency
DAR  Agricultural and Rural Development Program (Plan Puebla Panama)
DR-CAFTA  Dominican Republic- Central American Free Trade Agreement
ECA  Environmental Cooperation Agreement (DR-CAFTA)
ECLAC  United Nations Economic Commission for Latin America
ECOBIO  Strategy of the Conservation of Biodiversity Nicaragua
ECODES  National Conservation Strategy for the Sustainable Development of Costa Rica
EPR  La Empresa Proprietaria de la Red
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<td>ERB</td>
<td>Regional Strategy for Conservation and Sustainable Use of Biodiversity in Mesoamerica</td>
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<td>ESAF</td>
<td>Enhanced Structural Adjustment Facility</td>
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<td>EZLN</td>
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<td>FONDIN</td>
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<td>FTAA</td>
<td>Free Trade of the Americas</td>
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<td>FUNDAECO</td>
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<td>GAPIE</td>
<td>Consulting Group for the for Indigenous and Ethnic Participation</td>
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<td>GATT</td>
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<td>GTI</td>
<td>Inter-institutional Technical group</td>
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<td>MNC</td>
<td>Multinational Company/Corporation</td>
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<td>NAFTA</td>
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<td>NGO</td>
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<td>PES</td>
<td>Environmental Services Payments Programme</td>
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<td>RENARM</td>
<td>Regional Environmental and Natural Resources Management Project</td>
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<td>International Mesoamerican Road Network</td>
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<td>RUTA</td>
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<td>SAP</td>
<td>Structural Adjustment Program</td>
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1. Introduction

"The journey of a thousand miles begins with one step".
~Lao-Tse

This thesis is an exploration into the debates surrounding the sustainable development concept. It analyses how the concept has impacted upon environmental governance in the Central American region, looking more specifically at how the concept has been embraced by different actors at different spatial scales within the environment/development arena. In particular the thesis examines how such debates have served to influence the direction of a regional sustainability initiative, the Mesoamerican Biological Corridor. This chapter first of all explains my interest in the whole question of sustainable development and why I believe subjecting the concept to closer scrutiny is so important and then it will discuss why Central America was the chosen area of research. Finally, the chapter outlines the major questions of the research and how the thesis intends to answer them.

1.1 Why is Sustainable Development Important?

The need to make development more sustainable has become one of today’s most crucial tasks that faces the international community. Over the last thirty years, global development patterns, in both the North and the South, along with a rising human population have accelerated the consumption of natural resources at an alarming rate, intensified global climate change, increased pollution rates and added to soil erosion, sedimentation and land degradation (Chase, 2002; Krist 2002; Barton, 2002; Schmandt and Ward, 2000; Zerner, 2000; Kelly and Granich, 1995; Rich, 1994; Parkin, 1991; Meadows et al., 1992; Lyman et al., 1990). Present rates of consumption and destruction of natural resources are clearly unsustainable and their continuation threatens not only the future of humanity but also the ecosystems upon which we as well as other species depend (Segschneider, 2002; Heinrich Böll Foundation, 2002a; Karliner, 1997) The need for nations, communities and individuals to live more sustainably, therefore, is no
longer a choice; it has now become a necessity. Having come from a strong conservation background, therefore, I was keen to embark upon studies that would deepen my understanding and knowledge of conservation issues by connecting such issues more directly to the broader processes of social/human development within which the natural world is situated.

The concept of sustainable development, around which the thesis revolves, first emerged in the 1980s and was rapidly taken up by a wide variety of global, regional, national and local decision makers to the extent that most economic development plans, corporate growth strategies or NGO operating principles will now at least make reference to the idea of sustainable development. It is a concept that is intended to provide a framework for decision-makers and planners working on environment and development issues. However, this framework is commonly poorly-defined and so broad in scope in most policy documents that the whole idea of sustainable development has become highly ambiguous. This lack of clarity has led to different actors operating within the environment/development arena interpreting sustainable development in a variety of different ways which in many cases has led to conflicts over how 'sustainability' can best be achieved and indeed practised. The thesis therefore explores how the manifestation of such ambiguities has impacted upon the direction of sustainability initiatives and more generally upon environmental governance as a whole.

Whilst the different conceptual dimensions of sustainable development (economic, environmental, social, corporate, scientific, political and spiritual) have been well explored in the literature (Hartwick and Peet, 2003; McCarthy and Prudham, 2004; Liverman, 2004; Karliner, 1997; Dresner, 2002; Bryant and Bailey, 2000; Eckersley, 1992), the actual ambiguities of how the concept is interpreted and its subsequent impacts on environmental governance is still a relatively neglected area of research. The need for clarifying the rhetoric of sustainable development is therefore essential if we are to approach a clearer understanding of how policy can

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1 The author holds a BSc in Environmental Science and Agricultural Ecology and an MSc in Conservation Biology.
be put into practice so that a more sustainable form of development can ultimately be achieved.

1.2 Why Central America?

Whilst the concept of sustainable development impacts the decisions made by actors in both developing and developed nations, the author was interested in analysing how the concept had been embraced amongst actors in a region of the world which is not only undergoing rapid economic change but is also considered to be a global conservation priority due to its biological richness. With this in mind, Central America was chosen as the geographical area of research as it provides a unique example of such a region and offers an invaluable opportunity to explore how the idea of sustainable development is being interpreted amongst stakeholders operating within the environment/development arena in one particular region of the developing world. Not only is the region home to one of the world's largest sustainability initiatives, the Mesoamerican Biological Corridor (MBC – see chapter 5) which is being implemented by the region's governments, the World Bank, the UN along with a range of NGOs, but other regional contemporary economic initiatives that, according to their promoters, are also trying to strive for 'sustainable development' are underway in the same geographic space; these include the Plan Puebla Panama (PPP), and the Dominican Republic-Central American Free Trade Agreement (DR-CAFTA). The PPP is a regional infrastructure initiative which, through implementing a series of individual programs such as road building, energy interconnection, and trade facilitation, intends on strengthening Central American integration and improving the region's economies. Indeed the PPP is also providing the physical infrastructure for the implementation of the DR-CAFTA, a free trade agreement.

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2 The term 'developing world' has been used here and throughout the thesis to describe countries that are underdeveloped in comparison to those countries that are more economically developed and industrialised such as the US, Japan, European countries etc. Other descriptions of 'developing nations' include the global south, majority world, third world and underdeveloped world. It is important to note that in some cases such definitions can be too simplified as there are countries within the 'developing world' such as Singapore, Taiwan, China etc that have more advanced economies than other developing nations but have not yet fully demonstrated the signs of a developed country. Such countries are categorised by economists as Newly Industrialised Countries (NICs).
which is based on the neoliberal philosophy of opening up markets, deregulating trade and privatising public services across the region (see chapter 6). The coexistence of these three initiatives within the same region allows for a deep examination of how the actors behind each of these initiatives (although in some cases the same institutions are behind all three initiatives such as the region’s governments) interpret sustainable development and how the concept has been employed within each. Whilst there has been extensive work conducted on the actual Mesoamerican Biological Corridor itself (Birriel, 2006; Chang, 2002; Chavarria, 2001; Corrales and Zuniga, 2001; Delgado, 2002; Dettman, 2006; Godoy-Herrera, 2003; Mendieta and Vinocour, 2000; Metrick, 2003; Miller et al., 2000; Radulovich, 2000; Ramos, 2004; Rivera, 2002; Rouquie et al., 2002; Sader et al., 2001; Toly, 2004; Varela, 2001; Vargas and Sandoval, 2002), little work has been conducted on the inter-relationships among and between the PPP, DR-CAFTA and the MBC and how they have impacted upon one another. The co-existence of these three mega-initiatives within one region allows for an in depth analysis into the sustainable development debates that revolve around them and allows for a deeper insight into how or perhaps whether Central America nations are achieving sustainability.

Finally Central America was also chosen as a region of research due to strong Loughborough University connections and contacts in both Costa Rica and Nicaragua which helped to initiate the research process, set up contacts and provide logistical support. These practical benefits, coupled with reasons given above made Central America an ideal location for this study.

1.3 Research Questions

The research for this thesis is made up of two key strands. The first strand considers the conceptual debates surrounding sustainable development which have been explored in this brief introduction and the second focuses these debates down onto the Central American region itself and how such debates have permeated and influenced regional conservation and economic development.
initiatives. By using the examples of the MBC, PPP and DR-CAFTA within the Central American region, the thesis aims to contribute and deepen our understanding of the theorization of sustainable development and its overall usefulness as a reference frame for decision-makers.

The next chapter will develop the context of the research in more detail by analysing the conceptual debates surrounding sustainable development, explaining how the concept has evolved over time and clarifying the nature of the competing perspectives on sustainability articulated on the international stage. Chapter 3 provides the background to the Central American region by first of all describing the nature of the region's environment and then discussing the past and present economic development patterns within Central America and how these patterns have impacted upon the region's environment. The chapter concludes with a discussion on the institutional responses to the current perceived environmental crisis in the region, providing the link to the three main empirical chapters of the thesis (chapters 5-7). Chapter 4 discusses the methods used to conduct the research and then chapters 5 and 6 analyse in detail the nature and dynamics of the MBC, PPP and DR-CAFTA initiatives, how the concept of sustainable development has influenced their directions and the impacts that they had across the region. Chapter 7, by using the examples of Costa Rica and Nicaragua, looks more specifically at how the regional initiatives have been implemented at the national level and how the concept of sustainable development has served to influence national environmental policy making. The conclusion summarises the key findings of the research and in doing so sheds more light on the value of the concept of sustainable development.
2. The Concept of Sustainable Development

"Once upon a time there were traditional patterns of order and balance between people's needs and the sustainability of their resources. Authority and accountability were close to the source of need and nature. Then came a period of disorder and destruction as resources were redefined to meet centralized, commercial goals of distant accountability and whimsical market forces."


2.1 Introduction

Over the last three decades the concept of sustainable development has become a spectacularly popular phrase increasingly used and liberally employed by environment- and development-orientated NGOs, national and local governments in the North and the South, major development agencies and the business sector alike. At the same time, as Gibbon et al. (1995; 31) point out, the concept "now liberally peppers almost every policy document and project proposal in agriculture, environment, population growth and development". Having risen to the forefront of environmental debates, there are now few major environmental policies or conservation projects that do not include reference to its ideals (Adams, 2002). Born out of the complexities of the dynamic environment-development relationship, sustainable development is a concept which tries to offer a fresh perspective on how to tackle the contradictory issues between conserving the environment and encouraging development. However its broadness has been its downfall as it still remains unclear as to what exactly sustainable development means in practice and to what extent it has affected the ways in which governments, international agencies, NGOs and the private sector think about and implement economic initiatives and development strategies (Adams, 1995; Peet and Watts, 1993; Qizilbach, 2001).

Whilst most definitions of sustainable development include some reference to economic and social development in relation to the protection of the environment and to inter- and intra-generational equity, it is its lack of specificity and clear definition that makes the attainment of sustainable development rather complex (Mitchell, 2002). Differences arise, in particular, when supporters of sustainable
development try to determine what exactly is to be sustained, what or who is to be
developed, how to link environmental and development objectives, and how to
determine when sustainability has been achieved (Parris and Kates, 2003). The
existence of a myriad of meanings and interpretations of sustainable development,
therefore, complicates its subsequent implementation resulting in highly
conflicting development initiatives, with contradictory objectives and outcomes,
that all conceive of themselves as embodying ‘sustainable development’. This
chapter endeavours to unpick the concept of sustainable development, looking in
more detail at its origins, as well as the different types of approaches and
interpretations that exist and how these affect its direction in theory and in
practice.

2.2 The Origins of Sustainable Development

After World War II, a growing awareness and concern for the environment came
to dominate public concerns. During this period various conferences were
organised, acts passed and organisations created in order to try and influence the
state of the global environment (Ranjan Sinha, 2002). With subsequent realisation
within developed countries of the impacts that economic growth was having on
their environments, the ensuing decades saw this environmental concern slowly
being incorporated into developmental and environmental debates by
international organisations (Adams, 2002). Towards the end of the 1960s, a series
of important publications contributed immensely to the raising of public
awareness about global environmental degradation. In particular, the publication
of Rachel Carson’s Silent Spring in 1962, which created a powerful argument for
the link between environmental pollution and its resultant effects on humans,
animals and plants, and Paul Ehrlich’s Population Bomb in 1968, which sought to
establish a connection between increasing human population and the acceleration
of environmental degradation, are often cited as the triggers for shaping the
environmental movement (Ranjan Sinha, 2002; Macdonald, 1998) (see Table 2.1).

Thomas (1999: 45) states that the “global environmental movement can be taken to include an international
cadre of expert scientists and officials of international agencies as well as the staff and activists of
environmental NGOs and the people’s movements both in the North and the South.”

3
Table 2.1
The Origin of Sustainable Development: Key Conferences and Publications

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>1962</td>
<td>Publication of Rachel Carson’s <em>Silent Spring</em>.</td>
</tr>
<tr>
<td>1968</td>
<td>Publication of Paul Ehrlich’s <em>Population Bomb</em></td>
</tr>
<tr>
<td>1972</td>
<td>The Club of Rome’s report ‘Limits to Growth’.</td>
</tr>
<tr>
<td>1980</td>
<td>World Conservation Strategy prepared by IUCN, UNEP and WWF.</td>
</tr>
<tr>
<td>1983</td>
<td>World Commission on Environment and Development (WCED) created.</td>
</tr>
<tr>
<td>1987</td>
<td>Our Common Future, the Brundtland Commission report prepared by the UN World Commission on Environment and Development.</td>
</tr>
<tr>
<td>1990</td>
<td>Caring for the Earth prepared by IUCN, UNEP and WWF (revised version of WCS).</td>
</tr>
</tbody>
</table>

By the end of the 1960s, a growing awareness, not only of the connections between human needs and the well being of the natural world but also of the need to balance the two started to evolve (MacDonald, 1998; Dresner, 2002). While the movement was at this time mainly limited to Northern countries, the scope of concern was global. In the early 1970s, the United Nation’s Founex Report (1971; 9) introduced to the international arena, the idea that;

“the environmental problems of developing countries fall broadly into two categories — the problems arising out of poverty (or a lack of development) and the problems that arise out of the very process of development”.

As the adverse consequences of human impact on the natural environment became more widely recognised, a more serious inquiry into the limits of the planet’s ability to deal with these impacts came into being (Kane, 1999).
In 1972, the Club of Rome issued a well publicised and rather controversial report entitled *Limits to Growth* (Meadows et al., 1972), which warned that life as we know it faced a sudden apocalyptic end if populations were not controlled and development practices were not dramatically altered to respect the Earth’s physical limits to growth (Kane, 1999). Although this report was heavily criticised for exclusively focusing on physical ecological limits to economic growth, it nevertheless succeeded in placing environmental issues squarely on the international development agenda (Brohman, 1996). This process was further advanced at a series of major international meetings, including the 1972 UN conference on the Human Environment held in Stockholm. Not only did this meeting highlight the different approaches and attitudes of developed and developing countries towards the environment/development dynamic differences which continue to be important today - but it also played an important role in the emergence of an alternative development paradigm during the 1970s which is credited with the emergence of environmental policies and accompanying institutional support (Grubb et al., 1993 cited in MacDonald, 1998). Although this paradigm included many other concerns, such as basic needs and self-reliance, it also primarily focused on the need to harmonize development with the environment (Brohman, 1996). The 1972 conference resulted in many Northern and Southern governments coming together to sign a number of regional and international agreements, (such as protecting wetlands and regulating the international trade in endangered species), the establishment of the United Nations Environment Programme (see Ranjan Sinha, 2002), and the publication of two documents – *The Stockholm Declaration on Human Environment* and *The Action Plan for the Human Environment* (MacDonald, 1998; CBD; 2005). These documents were among the earliest government-sanctioned attempts to set an agenda for

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4 The Club of Rome is a think tank NGO made up of scientists, economists, businessmen, international high civil servants, heads of state and former heads of state from all five continents “who are convinced that the future of humankind is not determined once and for all and that each human being can contribute to the improvement of our societies” (Club Of Rome, 2006).
global action in response to problems created by the environment/development dynamic. However, according to Macdonald (1998; 2) these documents did not contain a clear recognition or understanding of the complexities surrounding this dynamic.

Over the ensuing years, as researchers and policy-makers grappled with the contradictions of the environment/development relationship, the unifying idea of 'sustainable development' began to take shape (Thacher, 1992). In the early 1980s, a major contribution that illustrated growing NGO influence at the international level was the publication of the World Conservation Strategy (WCS) prepared by the International Union for the Conservation of Nature\(^5\) (IUCN) with support from United Nations Environment Programme\(^6\) (UNEP) and the World Wildlife Fund\(^7\) (WWF) (Thacher, 1992). This high-level policy statement gave currency to the term sustainable development, interpreting it as, "improving the quality of human life while living within the carrying capacity of supporting ecosystems" (IUCN, 1991; 146). O'Riordan (1988; 36-7) describes the WCS as:

"a transitional document, one that sought to be mediating a bridge between the conservationists of the developed world and the suspicious leaderships of the developing world".

However, the WCS had been written by a group of northern environmentalists whose main emphasis had been on habitat conservation. Not only did the WCS's environmental focus not gain popularity with development agencies but critics argued that the WCS did not address the political and economic changes that would be needed to bring about the goal of sustainable development. It was not until work of the Brundtland Commission a few years later that the idea of sustainable development was to become more widely politically acceptable (Dresner, 2002).

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\(^5\) The World Conservation Union (IUCN) is the world's largest conservation network dedicated to natural resource protection. The network consists of 82 states, 111 government agencies and more than 800 Non Government Organisations.

\(^6\) The United Nation's Environment Programme (UNEP) is a body of the United Nations created in 1972 that assists developing countries to implement environmentally sound policies and to encourage sustainable development.

\(^7\) The World Wildlife Fund for Nature (WWF) is a global non-profit conservation organisation which works towards the conservation of nature, addressing issues from the survival of species and habitats to climate change, sustainable business and environmental education.
In 1983, the creation of the World Commission on the Environment and Development (WCED) by the UN General Assembly with the former Norwegian Prime Minister, Gro Harlem Brundtland, as chairperson, lead to the Brundtland Commission's publication of *Our Common Future* in 1987, the successor to the Brandt Report\(^8\) of 1980 (Dresner, 2002; Adams, 1993). Ambitiously claiming that "it is the most important document of the decade on the future of the world" (WCED, 1987; back cover), *Our Common Future*, reflecting belief in the mutual interlinkage between the economy and the environment, defined sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs"\(^9\) (WCED, 1987; 43). Even though this definition had since gained widespread political popularity, many still criticised it, arguing that its deliberate simplicity and vagueness had merely allowed for the "prevention of unnecessary and destructive objections" towards the sustainable development concept (Middleton and O'Keefe, 2001; 2). However, the Commission, in its defence, had acknowledged the fact that it had not developed a detailed blueprint for action but rather a 'pathway' which was hoped to guide policy makers and practitioners in developing their own approach (Mitchell, 2002).

One of the more direct consequences of the Brundtland Commission's work was the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, where the world's political leaders pledged their support for working towards achieving the goal of sustainable development (Dresner, 2002). Considered as a milestone in global environmental history, the Earth Summit induced governments to address the relationships between the environment and development rather than view them as separate issues (Macdonald, 1998). Against the backdrop of a growing awareness of the negative impacts of some of the current approaches to development, 177 governments

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\(^8\) The Brandt Report was prepared by the Independent Commission on International Development Issues under its chairman former German Chancellor Willy Brandt. Providing an analysis of the world situation at that time, the report sought to establish a link between deficiencies in social human development and economic structure (Segschneider, 2002).

\(^9\) Even today, many organisations within the environment/development arena, quote this definition when asked what sustainable development means to them.
approved an agreement, known as Agenda 21\textsuperscript{10}, outlining a framework of action for working towards a global partnership for sustainability\textsuperscript{11} (MacDonald, 1998; Dresner, 2002). This partnership according to the UNDP (2004b):

\begin{quote}
"commits all states to engage in a continuous and constructive dialogue, inspired by the need to achieve a more efficient and equitable world economy, keeping in view the increasing interdependence of the community of nations, and that sustainable development should become a priority item on the agenda of the international community".
\end{quote}

Conceived as practical tools for translating the principles of Agenda 21 into reality, two other binding agreements were also signed at the 'Earth Summit'; the Convention on Climate Change, which aimed to reduce the emissions of greenhouse gases (especially industrial emissions), and the Convention on Biological Diversity (CBD), the first global agreement on the conservation and sustainable use of biological diversity. The biodiversity treaty, in particular, marked another major step forward towards bringing the concept of sustainable development onto the international agenda by recognising that:

\begin{quote}
"ecosystems, species and genes must be used for the benefit of humans, but should be done in a way and at a rate that does not lead to the long-term decline of biological diversity" (CBD, 2006).
\end{quote}

The CBD gained rapid and widespread acceptance with over 150 governments signing the document at the Rio conference, and since then more than 187 countries have ratified the agreement (CBD, 2006).

Although the Rio Summit may have catalysed new forms of international environmental governance with national leaders committing themselves to curb environmental decline and social impoverishment, it seems that more than a decade on little has been done to reverse these trends (Heinrich Böll Foundation, 2004).

\textsuperscript{10} Agenda 21 is a “comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which human impacts on the environment” (UN, 2000a).

\textsuperscript{11} In the literature the term sustainability is also used at the same time and sometimes instead of sustainable development, for example the Brundtland report focuses more on the use of the latter whereas Agenda 21 uses the two terms interchangeably. O’Riordan (1988) specified that sustainable development is more of a term that ultimately gives priority to development, while sustainability is primarily used for addressing more environmental issues. For this thesis, it is the debates surrounding the concept of sustainable development that are discussed and in some cases whether sustainability can be achieved.
Littered with broken promises, therefore, the period since Rio has emphasised the gap between the sustainable development commitments made at the Summit and the actual accomplishments (Cooper and Vargas, 2004). One of the main problems that the Summit revealed was the sharp disagreement between developed and developing nations as to how to actually interpret sustainable development (Mitchell, 2002). Having just emerged from the “lost decade” of the 1980s (Bulmer-Thomas, 1991; 1), governments of developing countries, still struggling to meet the basic needs of their present citizens, were keen to utilise their natural resources to boost their economic development (Heinrich Böll Foundation, 2002a; Mitchell, 2002). For the developing countries therefore, development was given a higher priority than the environment (Beckerman, 1992). Developed nations, on the other hand, were more concerned about how the incorporation of environmental issues could jeopardise their own economic competitiveness, and argued strongly that developing countries “should modify their economic activities to avoid destruction of rain forests and other resources of global value” (Mitchell, 2002; 81). Interestingly, however, for some, such as Thomas (1999; 46), this Northern environmental concern has been invented “as an excuse for ‘pulling up the ladder’ and preventing those in the South from attaining northern levels of affluence”. At Rio, therefore, the different approaches towards sustainable development held by participating governments from both the North and the South forced compromises to be made in order to reach agreements (Segeschnieder, 2002). In some cases agreements were not even reached at all.

According to some interpretations, for Southern governments, the conference at Rio can be seen as a complete failure because the resource transfer (both funds and technology) they had hoped for from Agenda 21 did not materialise as a result of Northern governments backtracking from the ‘Rio Bargain’ (Heinrich Böll Foundation, 2002a; Dresner, 2002). Even though the Rio process had at least started the sustainable development ball rolling in terms of attempting to provide a blueprint through Agenda 21, the Earth Summit +5 (a United Nations General

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12 UNCED estimated that US$600 billion would be needed each year between 1993 and 2000 to implement Agenda 21 in low income countries of which US$125 billion was to come from aid from Northern governments. In reality aid fell from US$69 billion in 1992 to less than US$53 billion in 2000 and pledged additional benefits have failed to materialize (Heinrich Boll Foundation, 2002a).
Assembly Special Session on progress since the Earth Summit) five years later revealed that trends for sustainable development were worse than they were in 1992 (Macdonald, 1998). These trends were emphasised even more at the United Nations sponsored World Summit on Sustainable Development (WSSD) held in Johannesburg in 2002, which intended to review and follow-up initiatives launched at the Earth Summit in Rio. This time, governments from around the world managed to deliver an outcome that actually contradicted the basic principles of sustainable development (the integration of social, environmental and economic concerns) (Gutman, 2003). Rather than demonstrating an integration of these concerns, the WSSD revealed that the world’s governments were more prepared to discuss the economic and social pillars of sustainable development rather than the environmental pillar (Speth, 2003). Indeed as Pallemaerts (2003; 275) emphasises;

"the Johannesburg Declaration\textsuperscript{13} and the WSSD plan of implementation\textsuperscript{14} are shown to contain little in the way of political vision, credible new commitments and innovative approaches….but rather revealed the inadequacy of intergovernmental political governance structures to address the social and environmental consequences of economic globalization".

These analyses of the WSSD and its predecessor ten years before serve to emphasize the gaps between rhetorical and practical commitments to sustainable development. Clearly, in many cases, sustainable development objectives are still being set as future targets, rather than included as fundamental operational elements of major agencies and institutions. Measuring and assessing whether the goal of sustainable development is actually being met remains profoundly difficult. Within this context, therefore, as Adams (1993; 207) argues “it is far from clear whether sustainable development offers a new paradigm or simply a green wash over business as usual”. Could it be that sustainable development has just become a rather over-used and meaningless buzzword offering few if any tangible

\textsuperscript{13} The Johannesburg Declaration is a declaration made by all the world’s governments that attended the WSSD in Johannesburg, South Africa between 2 and 4 of September 2002 reaffirming their commitment to sustainable development (UN, 2002).

\textsuperscript{14} The WSSD plan of implementation goes hand in hand with the Johannesburg Declaration which specifies the way in which sustainable development is to be achieved by the world’s governments. According to the plan “poverty eradication, changing unsustainable patterns of production and consumption, protecting and managing the natural resource base of economic and social development are overarching objectives of, and essential requirements for, sustainable development” (Global Development Research Centre, 2006).
results, a concept of "monumental emptiness, carrying a vaguely positive connotation?" (Heinrich Böll Foundation, 2002a; 14). The next section aims to explore the differing interpretations of the concept in a little more detail.

2.3 Competing Perspectives towards Sustainable Development

The problem of putting sustainable development into operation stems from the fact that it still remains an ambiguous concept and does not have, as yet, a universally accepted definition, nor practical guidelines for policymakers (Gillis and Vincent, 2000). With many different interpretations of the concept, therefore, bridging the gap between rhetorical commitments and actual implementation has been made somewhat difficult. In some cases where policies have been put into practice, they often look very different on the ground from the way those policy designs appeared when they were first created (Cooper and Vargas, 2004). The definition given by the Brundtland Commission (see previous section) is the one that is adopted the most frequently on the global scale, but even this meaning can be interpreted in numerous different ways. The obstacle here is determining what exactly the ‘needs’ of the present and future populations are and who defines them (Dresner, 2002; Redclift, 2002). The ‘taxonomy’ of sustainable development set out by the Board of Sustainable Development (1999) identified what these ‘needs’ could be and categorised them as ‘what is to be sustained’ e.g. the protection and conservation of natural resources, and ‘what is to be developed’ e.g. people, economy and society (see Table 2.2 below) and tries to avoid emphasising any one particular aspect more than another (Miller, 1995).
<table>
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<th>Table 2.2</th>
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<tr>
<td>Taxonomy of sustainable development</td>
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</tr>
<tr>
<td><strong>What is to be sustained</strong></td>
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<tr>
<td>Nature</td>
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<tr>
<td>• Earth</td>
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<td>• Biodiversity</td>
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<td>• Ecosystems</td>
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<td>Life support</td>
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<td>• Ecosystem services</td>
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<td>• Resources</td>
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<td>• Environment</td>
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Source: Board of Sustainable Development (1999)

2.3.1 Mainstream Interpretations

Whilst the variety of approaches in the literature arises from the level of significance placed on each of these two components, it is possible to identify what Adams (1993; 208) denotes as a 'mainstream' in sustainable development thinking. Mainstream interpretations, originally based loosely around the United Nations and IUCN initiatives, tend towards the 'what is to be developed' (or anthropocentric) end of the spectrum (Mitchell, 2002) and a key concept that recurs in these interpretations is that the only way to tackle environmental problems is through enhancing economic growth\(^{15}\) in both the developing and industrialised worlds (Adams, 1993). The Brundtland report embodies some of these assumptions, particularly via an emphasis on the need to maintain and revitalise the world economy, arguing for "more rapid economic growth in both industrial and developing countries, freer market access for the products of

\(^{15}\) Economic growth should be distinguished from economic development as the latter implies improvements in organisation but not necessarily increases in resource consumption (Primack, 1998)
developing countries, lower interest rates, greater technology transfer and significantly larger capital flows, both concessional and commercial” (WCED, 1987:89). The report stressed that the achievement of sustainable development is ultimately dependent on stimulating economic growth both in order to help overcome poverty and to generate the resources needed to develop new environmentally friendly technologies (Rich, 1994). It seems, however, that whilst firmly committed to the ideologies of capitalism (Adams, 1993), the report, as well as the agreements made at Rio, did recognise the need for far-reaching global transformations in how growth was achieved and how resources are controlled and mobilized to make it less material and energy intensive and more equitable in its impact (Rich, 1994; Brohman, 1996; Mitchell, 2002; WCED, 1987). In many ways the Brudtland report interprets sustainable development from a largely interventionist or reformist angle, an orientation which recognises the need for regulations and direct interventions in support of environmental objectives. Therefore, rather than placing the emphasis on “the trade offs between economic and biological systems” (Redclift, 1992; 29), Our Common Future;

“focuses on the potential for fairly minor reforms of the existing economic systems involving new approaches (e.g. rational planning of land use and ecosystem exploitation, people-orientated and ‘bottom up’ development planning) (Adams, 1995; 90).

Within the interventionist context, the WCS too, whilst having little to say about the structures of wealth and power that constrain implementation, argues that traditional wildlife conservation interests are entirely compatible with the growing demand for a more ‘people centred’ development (Adams, 1993). These publications, therefore, including the WCS’ successor Caring for Earth: A Strategy for Sustainable Living published 10 years later (IUCN, 1991) as well as Agenda 21, resulted in an initial ‘official’ sustainable development agenda that viewed sustainability as dependent not only upon the continued pursuit of growth especially in poor nations, but also such factors as the establishment of more participatory forms of global governance, considerable resource transfers from North to South, binding new international laws and conventions and the promotion of a rights-based approach to development issues (Charkiewicz, 2002).
However, even though these reports attempted to address both environmental and developmental concerns, the mainstream thinking which has been adopted, not only largely skates over political and economic issues but also fails to challenge the capitalist growth paradigm (Adams, 2001; Adams, 1993). It has also been noted how this mainstream thinking suffers from a debilitating lack of understanding of the environmental dimensions of sustainability. However, it would seem that over the last decade or so, there has been a shift within the mainstream school of thinking, which has become inherently more neoliberal (as demonstrated by the lack of commitment made at WSSD by world leaders where interventionist thinking seems to have disappeared). This shift into the neoliberal paradigm has had and still is having severe implications not only on the perceived environment/development dynamic but also on the environment itself.

2.3.2 The Shift into the Neoliberal Paradigm

Since the 1990s, particularly on the international stage and especially within the Bretton Woods Institutions (BWIs), sustainable development has been increasingly interpreted with more of a neoliberal emphasis. As Hartwick and Peet (2003; 189) point out;

"neoliberal economic policies favour an outwards orientated, export economy, organised entirely through markets, along with privatisation, trade liberalisation, and limited state budget deficits".

Not only do these neoliberal perspectives focus on economic growth as the solution to environmental problems, but they also view market forces as the most important tool for regulating the environment (Liverman, 2004; Zerner, 2000). This 'market environmentalism', as Mohamad Salih (2001; 123) argues;

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16 Institutions such as the World Bank, IMF, IFC (International Finance Corporation and IBRD (International Bank for Reconstruction and Development) that were empowered to oversee international economic relations at the Bretton Woods negotiations, New Hampshire, USA, July 1944 (Milward, 2000)

17 Being one of the main cogs of neoliberalism, free market access would allow for varying centres of capital power to compete unrestrainedly between themselves across any national borders, abandoning the national powers to protect indigenous production or consumption from foreign competition (Middleton and O'Keefe, 2001).
"is an extension of the ethos of neo-liberal globalization and therefore both treat
global environmental protection as subservient to global capital flows and the
expansion of trade and economic growth".

In this way, market environmentalists argue that "the further market exchange
penetrates into the environment, the greater the efficiency of environmental
management" (Adams, 2002; 422). Indeed, market environmentalism, has been
one of the major thrusts serving "to inform the policies of the World Bank\(^{18}\) and
the International Monetary Fund (IMF)\(^{19}\) organisations which, especially through
structural adjustment lending\(^{20}\), have "pressed for the economic liberalisation, the
elimination of market imperfections and market inhibiting social institutions"
(Potter et al. 1999; 96). However such emphasis on the market has lead critics to
view this approach as being particularly utilitarian, individualistic and
anthropocentric (Low and Gleeson, 1998). Despite such criticisms, there are areas
of resource management where market environmentalism can be useful in relation
to valuing environmental resources in economic decision-making (Adams, 2002).
However, problems can arise when it is assumed that (a) free markets always
work in this way (which assumes that all environmental issues can be valued
monetarily) and (b) that the liberalization of markets does not have detrimental
impacts on environmental goals.

The main thrust behind market environmentalism is the concept of 'nature
commodification' which puts forward the idea that nature can only be valued (and
hence protected) when it has a use to society and a price in the global market
(McCarthy and Prudham, 2004). Thus, rather than having an intrinsic value,
nature is viewed as more of a product or an asset to the global economy with
policy proposals pursuing the setting of prices for environmental 'goods' and
'services' (Adams, 2002). In this way carbon sequestration, water, soil, and
biodiversity conservation, are not just seen (or seen at all by some) to be necessary

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\(^{18}\) Behind the World Bank are neoliberal governments from major developed countries whom form part of the
board of directors through monetary contributions. The USA is the biggest shareholder with 16.41% of the
votes, then Japan with 7.87%, Germany with 4.49%, UK with 4.31% and France 4.31%. The rest of the
shares are divided by the remaining member 179 countries (World Bank, ND).

\(^{19}\) The IMF consists of 185 member countries and is an institution that was conceived alongside the World
Bank in 1944 at the Bretton Woods conference to provide a framework for international economic
cooperation (BIC, 2007a).

\(^{20}\) Structural adjustment requires recipient nations to implement macroeconomic policy changes that would
liberalise their trade investment policies (see chapter 3 section 3.2.2) (Welch and Oringer, 1998).
natural processes to maintain life on Earth but they are merely presented as
environ-mental services that may be profitable

(World Rainforest Movement"

2003a) (chapter 7 section 7.4.1 discusses environmental services in more detail).
Indeed the commodification and commercialisa Lion of such natural 'products,
Nygren (1998; 212) argues, "'is often controlled by multinational

as

".
tionS21
corpora

However, whilst societies throughout the world have long been engaged in the
commodification of nature via extraction, production and processing and trade, it
is only over the last two decades that;
//a variety of governmentalorganisationsand multilateral financial institutions
and corporations have sought to fashion and to implement a new family of
environ mentali sms basedon markets, commodityflows, incentives and tile idea
that peoplearefundamentally economiccreatures"-'(Zerner, 2000; 3).
The neoliberal paradigm, whilst emphasising the importance or even the prerequisite of the private ownership of natural resources and their conversion into
subsequent capital, demonstrates "'a massive transformation
environment

relationship

of the human-

landscape"
the
economy
of
regions
and
of
political

(Liverman, 2004; 734). It can therefore be argued that neoliberal approaches
towards

sustainability

justify,
to
appear

if

not Promote,

fundamental
a

"market-friendly"
to
interventions,
nature, where
restructuring of social relations
designed to manage nature more effectively, also serve to legitimise particular
land
(private
and resource ownership)
social orders

de-legitimise
and
others

(com.munal land rights, national forms of land management etc).These tendencies
be
seen in current emphases upon the privatisation of natural resources; the
can
introduction

for
(paying
South
in
the
to
reforestation projects
of carbon offsets

dioxide
offset excessive carbon
engineering; the growth
promotion

in the North);

bioprospection

fees
for
'public"
of user

of ecomarkets and environmental

and genetic

nature reserves; and the

payment service schemes (see

Prudham,
McCarthy
2004).
Placing
2000;
(Martinez
7)
and
a value
chapter
-Alher,

21 A multinational corporation (MNC) or a transnational corporation (TNQ is an enterprise made up of
delivers
two
establishments
or
services
in
or more countries.
production
manages
which
entities
sex,cral
lot
influence
international
big
budgets
exert
a
of
over
can often
relations and local
Large multinationals with
economies.
20


on nature in this way, allows for private access to resources and the cornering of the market, usually by transnational corporations (TNCs).

Neoliberal policies, whilst pushing for unlimited and unregulated economic growth, not only seem to benefit a small sector of society, but they also have disastrous effects on the global and regional environments (Miller, 1995; Hartwick and Peet, 2003). Indeed, the expansion of trade liberalisation, for example, which has swept the globe over the last decade with many nations signing bilateral as well as multilateral trade agreements e.g. DR-CAFTA and NAFTA (see Chapter 6) has, as McCarthy (2002; 328) argues, “advanced an unmistakably neoliberal approach to environmental governance to the likely detriment of environment quality and human health”. In particular, this neoliberal approach to environmental governance was demonstrated on the international stage just two years after Rio when the world’s governments, having committed themselves to protecting the global environment, reconvened in Marrakech in 1995, in conclusion to the Uruguay Round22 of the GATT23, to discuss ways in which natural resources could be made profitable.

The evidence that emerged from these ‘Rounds’ suggested that there was a neglect of consideration for the environmental impact of GATT policies (Elliot, 1994). For institutions such as the GATT and the World Trade Organisation (WTO), open markets are the answer to developing sustainably (Mohamad Salih, 2001; Elliot, 1994); through their eyes the world is conceived as a single huge marketplace (Sachs, 2000). In this way, the GATT and WTO promote the argument that increased trade can in fact benefit the environment. According to this view, “expanding trade and increasing market access has led to larger per capita incomes that, in turn, provided more resources ‘to contain environmental damage’” (Hartwick and Peet, 2003; 193). However, although there is little agreement as to how trade liberalisation actually impacts the environment,

---

22 ‘Rounds’ are phases of greater action in which countries negotiate to liberalise world trade through reducing import and export controls and by eliminating trade barriers. The Uruguay Round, which started in 1986, was the latest Round before Marrakech (Elliot, 1994).

23 GATT (General Agreement on Tariffs and Trade) was established in 1947 with a view to engineering the post war economic reconstruction, in conjunction with the UN and the World Bank, through the promotion of free trade. The creation of the WTO in 1995 at Marrakech replaced GATT (Elliot, 1994; Borregaard, 2001)
environmentalists maintain that through freeing up the market there is more emphasis on growth and development at the expense of global environmental protection. Indeed, free trade as Dresner (2002; 47) points out "tends to encourage a lowering of environmental standards for short term comparative advantage". Without proper environmental protection policies, legal instruments and economic incentives, therefore, trade liberalisation can result in severe land degradation and environmental disasters (Mohamad Salih, 2001). At the same time free trade also brings with it social implications especially in the face of declining global resource availability and the exposure of poorer countries to international competition, which as Dresner (2002; 47) states "can prevent them from developing their own industries which drives small producers to the wall". However, although the aggressive intensification of free trade may be leading to the acceleration of environmental degradation and social conditions in many parts of the South, the growing outcries from environmentalists and affected peoples have continued to fall on deaf ears when it comes to the promoters of neoliberalism.

As the neoliberal model has become more solidified across the globe it would seem that the sustainable development debate according to Etherington (2003; 13);

"has been used cynically to promote the opening up of markets, financial deregulation, privatisation of natural resources and biopiracy, on the grounds that this will help to reduce poverty and achieve ecological sustainability"

However, whilst such neoliberal polices are being promoted, the world continues to sink deeper into poverty and ecological decline, and the gap between the rich and poor countries carries on growing (Heinrich Böll Foundation, 2002a; Adams, 2002). In essence, the gradual neoliberalization of the dominant meanings attached to the idea of sustainable development have meant that the international community's initial commitments to environmental goals expressed at Rio have gradually been replaced by vague statements of intent. Some northern governments have even backtracked from the commitments they have already

24 According to Elliot (1994: 52) "the principle of comparative advantage suggests that if each country were to concentrate on what it produced best, everyone would gain from the growing volume of world trade". In this way, the sharing of wealth therefore depends on a free international market.
made by pulling out of multilateral initiatives. For example, the US withdrew from the 1997 Kyoto Protocol\textsuperscript{25} on climate change in 2001 because its government was more concerned for the effect the agreement would have on its economy (United States Embassy, Austria, 2001). In many ways therefore, today it would seem that at the international level the freedom of markets has become the supreme value in politics as few government and businesses seem willing to commit to social and environmental goals (Heinrich Böll Foundation, 2002a; Speth, 2003).

2.3.3 Alternative Interpretations

Although at the international level, the mainstream interpretations of sustainable development (interventionist and neoliberal) prevail, other somewhat more radical alternative approaches towards the concept can be identified. These tend to be drawn from the various schools of environmentalism in both their technocentrist and ecocentricist guises (Adams, 1995; Adams, 1993). These approaches tend to argue for a more radical transformation in dominant development strategies and place more emphasis on the sustainability end of the sustainable development couplet. Environmentalists, therefore, tend to express the view that the overbearing dominance of neoliberal attitudes we continue to see in our world and the continued advocation of endless growth of the global economy is clearly unsustainable, especially where there are more resource intensive lifestyles. For one thing, they argue, economic growth cannot continue \textit{ad infinitum}, even with increasing efficiency in energy use and a more conservation orientated approach to agriculture (Rich, 1994). An alternative way of thinking calls for a more profound change in economic logic and the need to understand the pressure that growth itself causes, not only in the short but also in the long term (Miller, 1995). That said, there does not seem to be a single, well-articulated environmentalist alternative to the mainstream interpretation of sustainable development but rather a range of interconnected ideas about the relationship between our societies and nature.

\textsuperscript{25} The Kyoto protocol committed industrialised countries to an overall reduction of 5.2\% in their collective annual emissions of the main greenhouse gases in the commitment period of 2008-12 compared with 1990 levels (Dresner, 2002)
The technocentric approach towards sustainable development involves ideas of ecosystem management and rational utilisation of resources and land, promoting an attitude that advocates more rational planning (Adams, 1993). It also includes ideas of ecodevelopment which also fall within the ecocentric discourse (see below) (Brohman, 1996). Indeed, the technocentric approach, whilst spanning the ecocentric discourse is very closely connected to the interventionist approach discussed above, although the interventionist approach tends to place more emphasis on meeting human rather than ecological needs (Parris, 2003). Techcocentrism, on the other hand, whilst advocating wise use philosophies of conservation planning, considers the ways in which economic growth can be achieved without undue environmental costs (Adams, 1995). This way of thinking served to influence the IUCN’s publication, the World Conservation Strategy as well as the Brundtland Report, although the latter sought to apply such techniques to minimising impacts of the current growth-obsessed world order, rather than the creation of new forms of global resource management and development strategies.

Jordan and O’Riordan (2000) make a distinction between these subtle differences within technocentrism, one being termed as *cornucopian technocentrism* (where science and technology are seen as tools that can limit the environmental costs of current growth strategies and thereby secure their continuation) and the other as *accommodating technocentrism* (where potential limits to growth are recognised and science and technology are applied to the development of more effective environmental management). The IUCN and UN documents, therefore, in relation to the mainstream thinking of sustainable development (discussed in section 2.3.1), are more technocentrist than ecocentrist, reformist and not radical and situate themselves firmly within a paradigm of continued capitalistic economic growth (Adams, 1993).

According to authors from alternative perspectives of sustainability e.g. ecofeminism and deep ecology, the technocentric approach does not examine the roots of environmental problems within socioeconomic structures and society-nature relations. Instead, these critics believe that the technocentric approach can
lead to a type of *environmental managerialism* which only seems to offer technical "within-the system solutions to these environmental problems, which are viewed as too narrow and self-defeating" (Brohman, 1996; 310). This *environmental managerialism* is strongly objected to by Redclift (1988; 644-5), suggesting that it is;

> "a protective and reactive response which only considers problems after development objectives have been set; it separates the environmental consequences from the social and economic effects of development; and it deflects attention away from the context of environmental problems".

Brohman (1996; 311) supports this argument by indicating that "there is not much point in implementing technologically based strategies that fail to address the common roots of environmental destruction". Not only does he suggest that sustainable development should be linked with goals of distributional equity and social justice but he also puts forward an alternative approach of *political ecology* which considers the types of social and political transformations that are necessary to achieve meaningful conservation goals (e.g. community based conservation at the local level especially around protected areas). Since its origin in the 1970s, the recently evolved framework of political ecology, in attempting to connect environmental ideas into a re-launched eco-socialist agenda, has contributed immensely to Third World environmental analysis (Brohman, 1996). With promoters of this approach arguing that environmental problems are rooted within social institutions and economic relationships, political ecology, provides a new way of understanding the political and structural processes (such as the role of the state—see chapter 7) at play behind environmental change (Bryant, 1992; Brohman, 1996; Bryant and Bailey, 2000). The idea in political ecology of a 'politicised environment', which considers the roles and impacts of the different actors upon the environment is an approach which has served to influence the analysis of this thesis.

Those who have a more ecocentric perspective on sustainable development believe that more radical changes to economy and society must occur e.g. zero growth or local level self-sufficiency (Adams, 2002). This perspective is more of a

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26 Community based Conservation (CBC) is an approach towards conservation that directly involves local people in decision making empowering them to be guardians over their local natural resources.
'green alternative' to world development which in its essence opposes "the institutionalism of the 'modern complex' of bureaucracy, industrialism, urbanism, the market economy, the technical/ scientific system and militarism" (Friberg and Hettne, 1985; 207). This idea of this green road of de-modernisation, as Friberg and Hettne (1985; 235) point out, would be;

"withdrawal gradually from the modern capitalist world-economy and launch a new non-modern, non-capitalist development project based in the progressive elements of pre-capitalist social orders and latter innovations".

Eckersley (1992) explains that ecocentric theorists are concerned to develop an ecologically informed approach that is able to value the environment, not just for individual living organisms but also ecological entities at different levels of aggregation, such as populations, species, ecosystems and the ecosphere (or Gaia). The approach aims to adopt a more conservation-orientated approach towards sustainable development, which also includes ideas of deep ecology, which from a non-anthropocentric perspective views the relationship between humanity and nature as harmonious and often means putting humanity under nature (Devall and Sessions, 1985; Thomas; 1998). Adams (1995; 95, 96) states that the ecocentric type of approach coined by Jordan and O'Riordan (2000) as communalist ecocentrism "calls for a new relation with nature that challenges utilitarian ideas as well as reformist and managerialist conservation". Not only does this approach emphasise the human-environment interaction, but it also recognises the need to rethink the meaning of ecodevelopment and the values central to the societies in which we live. By challenging anthropocentric thinking, therefore, ecocentrism and deep-ecology ecocentrism undermine the moral basis of development by involving more of an extreme conservationism approach, realising the rights and needs of other species (Adams, 1995; Jordan and O'Riordan, 2000). Critics of the ecocentric approach in some cases consider this type of thinking to be extreme in the sense that the Earth is usually put before humankind, for example, through arguments that might suggest that it is unacceptable to intervene in famines to sustain human lives at the expense of other organisms (Adams, 1995). Amin (1985) describes this green thinking as a form of religious fundamentalism which offers a
pessimistic view on the potential impact of social reform (Adams, 1995). In its defence, however, Eckersley (1992; 56) points out that:

"Ecocentrism is not against humans per se or the celebration of humanity's special forms of excellence; rather it is against the ideology of human chauvinism".

She continues to argue that from the ecocentric perspective each human individual and culture has the same right to live and evolve as any other species provided that it is done in a way that is sensitive to the needs of other human individuals, communities, cultures and species. Such ecocentric perspectives are considered by some to be somewhat reactionary and unrealistic in practice especially at the more national and regional scale. However, these types of perspectives do at least provide important connections between environmental movements and political and social movements (particularly in the form of eco-feminism27) and advocate more localised solutions to environmental problems. These notions, however, challenge the mainstream concepts and ideas of sustainable development and raise the question of how it can function effectively within the current system of social organisation and free market dominance.

2.4 Putting Policy into Practice

At present the world consumes more resources than nature can regenerate emphasising the fact that the current state of affairs in our world is unsustainable (Heinrich Böll Foundation, 2002a). Whether measured in terms of environmental conditions, economic stress, or the failure to meet basic social development goals, we have not measured up to the global commitments to sustainable development made by most of the world’s nations, at Stockholm in 1972, at the Rio Earth Summit in 1992, nor the World Summit in Johannesburg in 2002. Although many policy designs exist, the difficulty is the actual achievement of successful implementation (Cooper and Vargas, 2004). Indeed, problems arise when there is a clash of differing ideas between different actors as to how to actually be sustainable. Within the rhetoric of sustainable development, therefore, if

27 Eco or green feminism offers a divergent theme within the realm of environmentalism by pointing to the interconnections between feminist and ecological concerns (Adams, 1995; Braidotti et al., 1994).
there is no agreed and clear theoretical core and there is a lack of understanding of the relationships between the environment and socio-economics within development processes, how can successful development procedures be implemented? In this way theoretical clarification becomes a necessity, not only for the debate to continue and for sustainable development to have any long-term credibility but also to further the effort to maintain the living triangle, which includes environmental protection, social and economic development (Adams, 1993; Cooper and Vargas, 2004).

From the discussion in this chapter, it is possible to conclude that the concept of sustainable development, with its multitude of interpretations, still remains a much debated issue within the development paradigm (Segschneider, 2001). Sustainable development, as Cooper and Vargas (2004; 14) argue, is not a route map, nor, “a one way plan to utopia” but more a statement of intent that “offers no promises of quick answers to the many challenges we face”. It is a term so vast in its meaning that it has been stretched beyond its limits, being moulded to fit any interpretation ranging from a right wing government or financial institution to NGOs and grassroots organisations. Whether or not the meaning of the concept becomes less ambiguous which instead becomes more of a term lodged in solid foundations within the world of development embracing a “micro and macro scale, from peasant to transnational corporation, from field to biosphere” (Adams, 1993; 219) remains to be seen. The ideas of sustainability which will ultimately win out will be determined by the struggles between the different discourses outlined within this chapter (see Escobar, 1995). Although mainstream development discourses have become subservient to a potentially damaging neoliberal agenda, they have nonetheless raised the importance of environmental issues and provided the justification for funding for key areas of environmental research and policy. However, it is not until we delve deeper into the analysis of specific policy arenas and environmentally-motivated projects that the real potential of current approaches to sustainability can be assessed. Having explored the different approaches towards sustainable development in this chapter, the thesis now continues to examine the ways in which different actors within the environmental
arena in the Central American region have interpreted the concept and the conflicts that may exist between these different interpretations.
3. Background to Central America

"Considering the whole span of earthly time... Only within the moment of time represented by the present century has one species – man – acquired significant power to alter the nature of his world."

~Rachel Carson, Silent Spring (1962; 5).

3.1 Nature of the Environment

Having explored the main discourses of sustainability articulated within mainstream debates about development and their more critical counterpoints in chapter two, this chapter provides the background and context to the approaches of sustainable development that have been adopted within the Central American region. The first section explores the nature of Central American environments in more detail, and later sections look at how past and present economic patterns have developed and how they have impacted upon natural resource use and consumption within the region. The final section within the chapter investigates the evolution of environmental policy in the region and what is being done today in environmental protection terms.

Central America is among one of the most biologically diverse regions in the world (Weinberg, 1991; Conservation International, 2004; UNEP-CCAD, 2004). Comprising the seven countries of Guatemala, Belize, El Salvador, Honduras, Nicaragua, Costa Rica and Panama, Central America occupies a narrow strip of land situated in the northern tropics (from about 7°N latitude to about 18°N latitude) which connects the two continental masses of the Americas and divides the planet’s two largest oceans, the Pacific and the Atlantic (Heckadon, 1992; Leonard, 1987). This land bridge, whilst only covering 523,000 km² (approximately 0.5% of the Earth’s surface), harbours 7% of the planet’s biodiversity making it the second most important species diversity and endemism28 ‘hotspot’ in the world after the Tropical Andes (CCAD, 2002b; Conservation International, 2004). Twenty million years ago Central America,

28 Endemism is a term used to describe when a species is native to a geographic particular area and cannot be found elsewhere (Primack, 1998)
however, did not exist, so geologically, the region is still considered to be young. At that time, an ocean separated North and South America and a chain of volcanic islands stretched across the gap. With the movement of tectonic plates, the Central American straits began to close and the land bridge was consolidated (Heckadon, 1992; SICAP, 2003). The region’s landscape reflects extreme geological instability and has been formed as a result of numerous episodes of seismic and volcanic activity (Leonard, 1987). Due to the intense tectonic movements in the region, three quarters of the terrain, is occupied by a central mountain range that divides Central America lengthways into three distinct parts: the Caribbean slope, the Pacific slope and the Central Mountainous Zone or Central Valley (Leonard, 1987; Heckadon, 1992). Altitudinal diversity and its location between the two great oceanic weather regimes means that Central America possesses a wide variation in climate (Leonard, 1987). The mountain range, which is perpendicular to the circulation of the winds, causes the Caribbean Slope to be more humid than the Pacific Slope. Therefore, the Pacific coast tends to have more of a distinct seasonal pattern, with a dry season lasting from December to April and a rainy season roughly from May to November which can sometimes last from six to nine months depending on the area (Heckadon, 1992; Leonard, 1987).

The Central American land bridge permitted what Heckadon (1992; 5) refers to as the “great American biological exchange”. For hundreds of millions of years North and South America had been separate continents which meant that species development was geographically confined and indeed controlled by the existence of physical boundaries to dispersion. However, the creation of the new isthmus allowed species from the south to migrate north and species from the north to migrate south (Heckadon, 1992). This fact along with the existence of a great variety of climates and microclimates as well as landscape forms (lakes, lagoons, mountain ranges, valleys, plains, gulfs, islands, coral reefs, caves, sandy beaches cliffs and estuaries) gave rise to the region’s extraordinary biotic diversity (UNDP-GEF, 1999). Today, the main natural ecosystems of Central America include wetlands, rainforests, cloud forests, dry forests and pine forests (see figure 3.1).
Other important ecosystems that are present within the region are coastal-marine ecosystems with Central America possessing the second most important coral barrier reef in the world running along the coasts of Mexico, Belize, Guatemala and Honduras.

Not only is the region biologically diverse with high areas of endemism for mammals (26 endemic species), birds (17 endemic species), amphibians, reptiles and plant species (3698 endemic species), but also Central America is one of the most important world wide centres of crop genetic diversity with numerous varieties of agricultural crops such as beans, maize, squash, chilli, tomatoes, cacao and cotton (SICAP, 2003; Mendieta & Vinocour, 2000; OdD-UCR, 2002; UNDP-GEF, 1999). The region's diversity also stretches to the peoples of Central America with the majority of the region's population considered mestizo (ladino) - a mixture of European, native indigenous, and Afro-Caribbean blood. Additionally almost one quarter of the region's population consists of more than 50 different indigenous peoples many of which have descended from the Maya and subsequently have developed their own languages29 and cultural practices (Leonard, 1987; CCAD, 2002a).

With its cultural diversity, high endemism and biotic richness, Central America can be seen as a conservation priority (Aguilar-Stoen and Dhillion, 2003). However, the region is also relatively impoverished, is at times politically unstable, and has been and still is faced with the dilemmas of rapidly diminishing resources and foreign debt (Metrick, 2003). Although Central America experienced renewed economic expansion in the 1990s30 (see section 3.2.2), it remains one of the poorest regions on Earth; a fact which has led to massive exploitation of the area's natural resources31 (Energy Information Administration, 2002). Indeed, it is the continual pursuit of economic growth under the current neoliberal model,

29 Throughout the Central American region, two or more languages among Spanish, Creole, English and numerous Indian dialects are often used interchangeably (Leonard, 1987).
30 This growth, following the depression and debt crisis of the 1980s, was due largely to the development of new non-traditional exports and the growth of assembly factories in free trade zones under the neoliberal model.
31 According to the Energy Administration Centre (2002) “approximately half of all Central Americans live in rural areas, and it is estimated that the average family living below the poverty line burns approximately 12 tons of firewood a year”. This has had huge impacts on Central America’s forest resources.
coupled with growing populations\textsuperscript{32} (see table 3.1), which has entailed an acute, fast moving process of environmental destruction and has therefore placed the region's environment under new stresses (see section 3.3) (CCAD, 2002a). The impact of this neoliberal model and the previous patterns of economic development within the region and how they have had an impact on the environment will be explored in more detail in the following sections.

<table>
<thead>
<tr>
<th>Table 3.1 - Total population of Central American Countries between 1980 and 2000 (in thousands)</th>
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<tbody>
<tr>
<td>Belize</td>
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<td>Costa Rica</td>
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<td>El Salvador</td>
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3.2 Economic development patterns

3.2.1 The traditional agro-export model

The Central American environment has been significantly transformed by human beings over the last 20,000 years. For centuries prior to the arrival of the Spanish in 1509, thriving societies existed, such as the Maya, who occupied lands from the Yucatan peninsula in Mexico to El Salvador and northwestern Honduras (Weaver, 1994). Even though these ancient civilisations practiced shifting agriculture and terraced cultivation, which slowly modified the natural environment and forest cover, little of the forest was actually removed. (Faber, 1993). Large-scale exploitation of Central America’s natural resources and its indigenous peoples began to take place when the Spanish arrived and started to conquer parts of

\textsuperscript{32} In 2003, there were approximately 38 million people living in Central America of whom nearly 60% lived below the poverty line, especially in rural zones. The total population, growing at a rate of 2.6% per year, is expected to double within the next 25 years (Proyecto Estado de la Region, 2003; CCAD, 2002a).
region (Nicaragua, Honduras, El Salvador and Guatemala) in the early sixteenth century (Faber, 1993; Weinberg, 1991). It was this conquest that profoundly affected the nature of the societies of Central America and shaped them into what they are today (Booth & Walker, 1993). A political and economic system was imposed by the conquistadors that Faber (1993; 15) categorises as a form of “ecological imperialism”. The Spanish not only started to extract and export the region’s natural resources, they also massacred a large percentage of the local indigenous population, whilst others were enslaved and often transported to Caribbean Islands, Panama or Peru (Weaver, 1994). Costa Rica was not settled until the 1560s because, unlike the other countries, it did not offer readily accessible resources, was remote from the centres of colonial administration in Guatemala City and so had few attractions to the Spanish crown (Weeks, 1986). Whilst there is controversy surrounding the reasons why Costa Rica did not undergo the type of suppression that the other countries in Central America underwent, it is clear that the country has been and remains an “exception to isthmian social, economic and political norms” (Booth & Walker, 1993: 29).

Throughout the first few decades of the 16th century, it was the mining of gold and the sale of slaves that brought the first wave of prosperity to Central America. Soon after this period the first agricultural boom took place with cacao being the first export of significance, its cultivation expanding through Guatemala, El Salvador, Honduras, and Nicaragua and to a smaller degree, Costa Rica (Heckadon-Moreno, 1997; Weeks, 1985). However, this agricultural boom ended due to a scarcity of workers and competition from cacao produced by Venezuela and Ecuador (Heckadon-Moreno, 1997). Then, during the 17th and 18th centuries, indigo dye from the *juguilite* plant, although a minor contributor to the overall economy, replaced cacao as the major export. However this product was unable to compete with the synthetic dyes that were being developed in Europe in the 1850s, causing the indigo industry in Central America to crash (Heckadon-Moreno, 1997; Faber, 1993; Brockett, 1998; Weeks, 1985). Whilst the production of such commodities like cacao and indigo in early colonial times experienced cyclical booms and depressions, some authors argue that such agricultural booms kick
started the agro-exporting economy of Central America (Weaver, 1994; Heckadon, 1992). On the other hand, others argue that Central America’s international trade, despite these periodic booms, was marginal in the colonial period and that the whole economy of the region did not become oriented around the commercial production of agro-exports until the mid 19th century with the introduction of crops such as coffee (Weeks, 1985).

Although differences may arise in the literature as to when the agro-export model became the predominant economic model within the region, throughout the colonial period the exacerbation of unequal land distribution amongst landowners had become apparent. In particular, the establishment of latifundios - large estates and farms owned predominantly by wealthy urban merchants or latifundistas - had concentrated land into the hands of a few elitist groups (Faber, 1993; Weeks, 1985). According to Weeks (1986; 36) by the end of the colonial period in 1823 when Central America gained independence from Spain the “power over the use of land was so concentrated, that contemporary observers identified it as the major social and economic problem in Central America”. Indeed, the introduction of coffee in the 1840s skewed land ownership further often with large estates increasing in their size. As Weeks (1985; 13) points out “with the exception of Costa Rica, coffee production extended and reinforced a near-feudal system of land use”. With its profitability becoming evident, coffee production spread rapidly throughout countries such as Costa Rica, Guatemala, and El Salvador, which brought the landholding class into international trade. As a result, during the latter part of the 19th century, coffee became the region’s only major export, marking the period from 1850 to 1890 as the era of the formation of what came to be known as ‘coffee republics’ (Weeks, 1986; 37). Not only did this crop determine the health of the national economies but it also affected the political nature of the state (Weeks, 1986). The powerful, closely-knit elites who owned the large coffee estates were able to promote and protect their interests by controlling (or sharing control of) the state (Heckadon-Moreno, 1997; Booth and Walker, 1999). Indeed, it

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33 As Heckadon-Moreno (1997; 188) explains the central theme of the agro-export model “is the search for a crop whose exportation will generate wealth”. Although this sector embraces fishing, forestry and mining it is dominated by agricultural exports organised mainly in large enterprises (Fitzgerald, 1991).
was this concentration of land which was central to the struggles between the conservatives and liberals over the crafting of the nation state in the region during the early years of the Central American federation. It also sparked the intermittent resistance of peasants who were pushed off their lands to make way for the coffee estates through vagrancy laws34 (Faber, 1993; Weeks, 1985).

By the end of the 19th century, the US had replaced the British and the Spanish as the major power in the Americas and had become the dominant military power in the region. However, the US involvement within the region dates back to the drawing up of the Monroe Doctrine in 1823 after the end of the colonial rule which "staked out the Western Hemisphere as the domain of the United States" (Faber, 1993; 4). According to Willis and McIlwaine (2002; 15);

"it was only at the end of the 19th century that the US really had the military and economic might to act on this declaration, using the Monroe doctrine for declaring war on the Spanish".

This control over the region provided the backdrop to increasing direct investment by US corporations. Banana production, in particular, between 1890 and 1940, soon became the domain of large foreign enterprises, mostly from the United States and supplying the North American Market (Heckadon-Moreno, 1997; Weeks, 1986). According to Brockett (1998; 27);

"few issues concerning the history of Central American political and economic life have generated more intense controversy than the role of the great US banana companies".

Monopolising large amounts of land for production, banana companies "quickly became a law unto themselves, dominating governments from Panama in the South to Guatemala in the North" (Weeks, 1985; 15). This was particularly the case for Honduras and Guatemala. However although the banana boom greatly increased the foreign exchange earned by each of the Central American states, excluding El Salvador, the nature of the production did little to modernise the economies and contributed little to the social development of each country (Weeks, 1985; Faber, 1993).

34 Vagrancy laws gave the elite the ability to pick people up off lands to conduct labour intensive work.
In the years following World War II, the agro-exporting economies of Central America became a lot more complex with the introduction of cotton, sugar, tobacco and beef production. The most aggressive expansion was that of the cotton plantations along the southern coast of the isthmus (Weeks, 1986; Heckadon-Moreno, 1997; Weinberg, 1991). With large landowners increasingly monopolising the best agricultural land and resources, poor peasant farmers or smallholders \textit{(minifundios)}, who made up the subsistence sector typically producing basic foodstuffs, were forced into the surrounding hillsides that were unsuitable for agriculture. Having to intensely cultivate undersized and unsuitable poor quality plots, smallholders struggled to even raise food for domestic consumption let alone attempt to produce for the market (Leonard, 1987; Faber, 1993). As Zalkin (1988; 584) explains, this unequal development and division between the rich and the poor can mainly be attributed to such factors as “land concentration, the location of agro-export production, soil quality and other ecological considerations”. This underdeveloped, two-tiered agricultural economy has left the majority of Central Americans little means to improve their lives and has forced them to over-exploit their natural resources in order to survive (Faber, 1993).

The political systems that evolved to preserve this unequal economic system were harsh, repressive and authoritarian. With the exception of Costa Rica, the Central American region spent most of the 20\textsuperscript{th} century under civilian or military dictatorships (Booth and Walker, 1993). Even though they were clearly horrendously unjust, these political systems created a form of economic and political stability throughout the twentieth century. This was to falter during the 1970s, not only with the onset of the oil crises of 1972 and 1979, but also with the emergence of organised opposition movements in El Salvador and Guatemala (Willis and McIlwaine, 2002). In Nicaragua, the political conflict culminated in a revolution as the Sandinistas overthrew the dictatorial Somoza regime in 1979. After the tumultuous years of the revolutionary period from the late 1970s through most of the 1980s, a series of peace initiatives were instigated and the 1990s became a decade of post-war reconstruction as the countries of the region
came to terms with their violent pasts and tried to rebuild their nations (Willis and McLlwaine, 2002). It was also a period when democratisation began to take place, and so the Central American region started to become more settled.

During the three immediate post-World War II decades, the predominant agro-export development model was unable to attain sustained economic development for the region despite the large profits to be made and high production rates (see table 3.2 below) (Fitzgerald, 1991). The main limitations to such economies that are heavily agricultural dependent are that they are vulnerable to fluctuations in weather patterns, prices on international markets and other factors beyond their control (Aid Brief, 1983). At the same time, such dependence on the extraction and exportation of raw materials has had substantial implications for natural resource management (Leonard, 1987). In its traditional form, therefore, the agro-export model offers no future as it cannot address strategic issues of growth and equity, but can only exacerbate them (Torres-Rivas, 1991). As the next section goes on to explore, since the 1980s under the now predominant neoliberal model, there has been a shift away from this more traditional export driven development model, although there is still a massive emphasis on export-led growth in the region. The region has indeed found it difficult to break away from this model of export-driven development and has therefore remained dependent upon increased export of agricultural products and raw materials to generate the foreign currency needed to pay foreign debts, oil import bills, and capital goods for future industrial development (Leonard, 1987).
### Table 3.2. - Central America: percentage ratio of exports to GDP (in dollars at current prices)

<table>
<thead>
<tr>
<th>Country</th>
<th>1960</th>
<th>1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costa Rica</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>El Salvador</td>
<td>20</td>
<td>36</td>
</tr>
<tr>
<td>Guatemala</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>Honduras</td>
<td>22</td>
<td>38</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>24</td>
<td>37</td>
</tr>
<tr>
<td>Panama</td>
<td>31</td>
<td>44</td>
</tr>
<tr>
<td>Low income countries (except China)</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Oil importing Middle Income countries</td>
<td>14</td>
<td>18</td>
</tr>
</tbody>
</table>

**Source:** Brown (1994)

### 3.2.2 The Crisis of the Central American Economy and the Rise of Neoliberalism

Having explored the development and history of the agro-export model and its impacts upon Central American politics and economies, this section now looks at the more recent patterns of economic models within the region. During the three decades after World War II (1950 -1978), Central America enjoyed the steadiest economic growth in Latin America with the gross domestic product of the region at a whole growing at an annual rate of 5.3% (CEPAL, 1984; Gorostiaga and Marchetti, 1988). During the 1950s the Mexico City office of the United Nations Economic Commission for Latin America (ECLAC) drew up plans to create a Central American Common Market (CACM) among Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua. Contemplated as a regional free trade area that would be protected from the outside world by high tariff barriers, the CACM was created to try and spur regional economic integration, foreign investment, intraregional trade and industrialisation (O'Keefe, 2001; Booth and Walker, 1993). According to Leonard (1987; 53) a key notion behind the formation of the CACM;

"was that the five countries could collectively end their economic dependence on a few agricultural products and overcome the limitations to industrial development of their own small domestic economic market by
creating a larger economic market within which industrial producers could sell their products”.

It was also hoped that, by diversifying and increasing production, there would be a ‘trickle down’ of wealth to the poor (Booth & Walker, 1993). Resting on a “three-legged policy of protectionism, state intervention and net inflow of foreign capital” (Roxborough, 1992; 421), this model of development provided the impetus for *import substituting industrialisation* (ISI) on a national and regional scale (Paus, 1989). In this way the ISI policies enabled each of the Central American states to redirect its economy away from dependence on primary exports for foreign trade and to kick-start the production of manufactured goods for the domestic markets, mainly by way of industrialisation (Green, 2003; Leonard, 1987).

The CACM performed well in its first decade stimulating the region’s economic growth with intraregional trade increasing from 3.5% of total trade of the five countries in 1960 to nearly 30% by 1963 (O’Keefe, 2001; Leonard, 1987). However by the end of the 1960s the model began to falter because some countries such as Costa Rica and Guatemala were disproportionately benefiting from the regional free trade program at the expense of less developed Honduras and Nicaragua (O’Keefe, 2001). Also, as Paus (1989; 1) points out, “the overall economic growth continued to be dependent largely on the foreign exchange earnings of the traditional export sector”. The dominance of the agro-export model, therefore, meant that the resources were still concentrated in a small proportion of the population, which not only excluded a large number of people from benefiting from this economic growth but also restricted the impact on industrial growth by reducing the already small national markets even further (Gorostiaga and Marchetti, 1988; Paus, 1989). Indeed it was the distortions of the agro-export model (concentration of capital, unequal exchange, skewed income and property distribution etc.) experienced during this phase of rapid economic growth that contributed towards the economic crisis of the 1980s (Judson, 1993). In contradiction to what it set out to do, therefore, “the organisation of the CACM reflected the dominance of landed property and its orientation towards extraregional trade” (Weeks, 1986; 44). In January 1971, Honduras withdrew from
the CACM following the military confrontation otherwise known as the ‘Soccer War’\textsuperscript{35} between El Salvador and Honduras (see Durham, 1979). Then, with the oil shortage of 1973 sparking conflicting macroeconomic policies and unilateral currency devaluations, prices of imported raw materials increased and input costs began to rise. This resulted in investment rates being reduced along with productivity, output growth and the competitiveness of Central American products. Thus, by the end of the 1970s, and with the region engulfed in domestic civil strife, the CACM began to break down (O’Keefe, 2001; Booth and Walker, 1993).

For much of the period post World War II, import substitution was funded by foreign borrowing, which presumably was calculated to be a sensible low-risk approach at the time given the relatively low levels of international interest rates and the success of economic development policies (Willis and McIlwaine, 2002). However, the fall in export earnings and the rise in import bills and interest rates in the 1970s meant that many governments could no longer meet the conditions for repaying their international borrowing (Roddick, 1988 cited in Willis & McIlwaine, 2002). As a consequence, Central American Governments, having tried to borrow their way out of recession and political crisis, were forced to go into debt and run larger budget deficits to save their economies. Prior to 1970, Central America’s total external debt never exceeded $800 million for the region as a whole, however by the 1980s it had expanded more than ten times to $8.5 billion and then by 1990 it had tripled to $23 billion (Conroy et al., 1996). This debt made governments more dependent on foreign lenders, which eventually compelled them to undergo neoliberal structural adjustment programmes (SAPs) in the mid 1980s (Booth and Walker, 1993).

Deemed the solution to the resultant debt crisis of the 1980s\textsuperscript{36}, structural adjustment programmes aimed to “mandate macroeconomic policy changes that obligated recipient nations to liberalise their trade investment policies” (Welch

\textsuperscript{35} With the conflict between the two countries arising just after “three hotly contested soccer games in the qualifying rounds of the world cup in 1969”, the outbreak was coined the “Soccer Wars” (Durham, 1979;1).

\textsuperscript{36} As a result of the debt crisis and its subsequent falling of living standards, the 1980s otherwise known as the ‘lost decade’ has been recorded in Central American history as the worst decade experienced in the twentieth century (Bulmer-Thomas, 1991; Conroy et al., 1996)
and Oringer, 1998; 1). Originating in 1974 with the creation of the Extended Fund Facility by the IMF to supervise economic stabilisation programs in financially troubled countries, these policy packages (otherwise known as ‘The Washington Consensus’) had been formulated as loan conditions by Northern Governments and IFIs (IMF, World Bank and Inter-American Development Bank37) (Brohman, 1996; Roxborough, 1992). The neoliberal philosophies behind SAPs promoted by these institutions revive the old principles of economic liberalism that defended individual and private property rights and were linked with the beliefs of the economist Adam Smith (Liverman and Vilas, 2006). As already discussed in more detail in section 2.3.2, these principles pursue the belief that an unregulated market and private sector are the engines for unrestricted growth, the benefits of which will eventually trickle down from the owners of capital to the entire population (Welch and Oringer, 1998). In this way, in the 1980s multilateral and bilateral agencies put forward the argument that “the economic ills of Central America derived from an excess of state intervention in markets...or statism” (Pelupessy and Weeks, 1993). During this time and in pursuit of their neoliberal ideologies via the SAPs, the international financial institutions (IFIs) along with the US Agency for International Development (USAID), began to press Central American governments to move away from self-directed models of national development that focused on the domestic market (CACM) and turn towards ‘outward looking’ strategies that outline the importance of complete integration into dominant global structures of trade, finance and production (Robinson, 2001; Welch and Oringer, 1998). The neoliberal recipe that evolved was geared around a three stage economic transformation of stabilisation, structural adjustment and export-led growth, designed to enable the indebted countries of the region to

37 Established in 1959, the IADB has 47 member countries; 26 borrowing member countries in Latin America and the Caribbean (except Cuba), and 21 lending countries of which the United States is the single largest shareholder, with approximately 30 percent of the voting power, followed by Japan, 5 percent; Canada, 4%; and other lending members combined, 11% (BIC, 2007a). Today the IADB is the world’s largest development bank, lending more than $9 billion annually, making it the largest public lender for economic, social and institutional development projects in Latin America and the Caribbean. In order to accomplish their mission of poverty reduction, social equity, and environmentally sustainable growth, the Bank works in four main areas; fostering competition to increase the potential for development in an open global economy, modernising the State by strengthening the efficiency and transparency of public institutions, investing in social programs that expand opportunities for the poor, and promoting regional integration (BIC, 2004a; IADB, 2006).
change the structure of their economy to essentially become more market orientated. This ensured that their debt repayments were no longer defaulted to the northern commercial banks (Green, 2003; Milward, 2000). In order to do this, however, IFIs promoted very specific reforms within the region and governments were encouraged to devalue their currency (so the prices of imports would rise and the costs of exports decline), reduce state expenditure, deregulate foreign trade, liberalise their markets, privatise state owned companies and deregulate the labour market (Green, 2003; Willis and McIlwaine, 2002).

The access to continued external finance and the restructuring of the region’s economies did eventually result in reduced debt burdens and positive growth rates (IADB, 1997 cited in Willis and McIlwaine, 2002). However these macro-economic improvements were often at the expense of increasing income inequality and poverty exacerbation, with the main beneficiaries usually being the Central American elites, foreign investors and traders (Willis and McIlwaine, 2002; Welch and Oringer, 1998). As Conroy et al. (1996; 15) argue, it would seem that

“Central America has emerged from the decade of structural adjustment far more impoverished than it was when it entered, far more indebted, and with far fewer obvious development prospects than it had enjoyed in the previous decade”.

Rather than steering the region out of a crisis, the changes introduced by the SAPs created a new model of ‘selective growth’ that was both unequal and vulnerable due to its dependence on the external market (Green, 2003; Envio, 1992). Not only did the programmes weaken the more inefficient sectors without providing alternatives for their reinsertion into productive and social life, but SAPs also increased unemployment and lowered salaries (Envio, 1992). The state was slowly weakened diminishing its regulatory capacity and public services and privatisation became the new tool to transform production and social relations, reinforcing the concentration of large enterprises into the hands of a few (Envio, 1992).

Although Central American economies have always been dependent on the export sector and international markets to a certain degree, even through the period of
the CACM, the shift away from ISI policies to the neoliberal economic model, as Robinson (1998a; 469) describes, is associated with a move from the ‘national’ to the ‘transnational’ as part of globalization. Building upon the neoliberal restructuring of the 1980s and the program of free-market capitalism, including wide-ranging processes of liberalisation and privatisation, the move to the more recent transnational model merely solidifies the neoliberal hold over the region. One of the key elements to the functioning of this model is the dramatic increase in new economic activities linking the region to the global economy - such as maquiladora production (especially of garments), transnational services (particularly tourism), non-traditional agricultural exports (NTAEs) and remittances from Central Americans working in the USA - which have started to overshadow the region’s traditional agro-export model (Robinson, 2001). These shifts in economic activities have had social, political and environmental impacts within the Central American region. For example the globalization of commerce has induced the conversion of millions of acres of land to non-traditional export crops such as fruits, flowers, soybeans, ornamental plants and industrial goods, while bankrupting small farmers who have been unable to compete in the export sector (Chase, 2002). Such land use changes have intensified the already unequal land distribution that came about with the introduction of the agro-export model.

Robinson (1998a; 470) argues this new transnational development model has placed the global economy into the hands of a new transnational elite, which he defines as

“supranational institutions such as the IMF and other international financial agencies (IFIs), informal governments institutions such as the G-7 Forum and informal private institutions such as the Trilateral Commission”.

This elite is transnational because it is tied to globalized circuits of production, marketing and finance and has interests predominantly in global accumulation rather than in national or local concerns (Robinson, 1998a). The entrance of the new transnational model has allowed such sectors to gain control of the global economy by decentralising production and distribution whilst concentrating and

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38 Maquiladoras (or maquilas) are garment and electronic assembly factories that bring in parts from other countries and use cheap labour to make finished products.
centralising "worldwide economic management, control and decision-making power in transnational capital" (Robinson, 1998a; 470). Whilst Robinson's depiction of the transnational elite provides a useful understanding about the current transnational processes occurring in Central America, it fails to recognise the power of the Central American elites within the region and how neoliberalism is not only an external imposition but also a regional occurrence. Nonetheless, the increasing involvement of such supranational institutions within the region and the massive influence these institutions have over global decision-making have resulted in changes to state and political systems. Indeed, the extensive adoption of neoliberal policies within Central America and the subsequent downsizing of the state have allowed institutions such as the World Bank to further exercise their influence over the region (Willis and Mcllwaine, 2002; Robinson, 1998a). This institutional influence has also been experienced in the governance of regional sustainability initiatives.

Throughout the 20th Century, as we have seen in this section, it is clear that different forms of capitalism have been operationalised throughout the region in different ways, from the agro-export model of the post-war years to the now predominant neoliberal model. As the next section goes onto explore, both these economic models have had huge detrimental environmental impacts within Central America. With the earlier agro-export model focusing on monoculturalism and further exacerbating the skewed land ownership in the region, the foundations have been laid upon which the neoliberal model has been developed. However, rather than addressing the environmental problems that the agro-export model caused, the neoliberal model seems to be doing nothing to solve them, rather just intensifying these problems. Interestingly though, at the same time as neoliberalism was becoming the predominant economic model in the region, there was also an upsurge in environmental policy making to try and address the environmental problems of the region. However, from the supra-institutional and indeed state perspective, it would seem that these environmental problems have been addressed in a particularly neoliberal manner. Chapter 2 (section 2.3.2) discusses how actors on the international stage have embraced the neoliberal interpretation of sustainability which essentially views nature as a
product that can be bought and sold within the world market. Whilst this may be
the more dominant mainstream interpretation of sustainable development, other
and perhaps more radical interpretations of the concept (see chapter 2 section
2.3.3) have challenged this mainstream discourse, particularly through more
autonomous environmental movements such as promoted by some NGOs and
grassroots organisations (chapter 7 discusses the role of this sector in relation to
Central American environmental issues in more detail). However, it is apparent
that the neoliberal way of thinking, as section 3.4 of this chapter goes onto explore,
dominates the environmental policies that have been created by institutions within
the region. Before analysing the institutional response to the environmental
problems of the region, the next section looks at the main environmental impacts
of the current economic development patterns.

3.3 The Environmental Impacts of Current Economic Models

Despite Central America’s importance to global biodiversity (see section 3.1), the
region is under extremely heavy development pressure. The main causes of this
development pressure are the economic and demographic trends of the 20th
century as outlined in the preceding pages, which have brought dramatic physical
changes to almost all areas of Central America (Leonard, 1987). Indeed the
prevailing neoliberal economic development model exacerbates the patterns of the
previous agro-export model and builds on the skewed land distribution legacy of
colonialism, which has increased rural poverty and ecological degradation of the
region (Chase, 2002). At the same time, the increased spur of economic growth
through trade liberalisation (e.g. the implementation of agreements such as the
Dominican Republic - Central American Free Trade Agreement – see chapter 6
section 6.7 and see also chapter 2 section 2.3.2), one of the key pillars of
neoliberalism, has also lead to the increased consumption of minerals, forest
products, foods and manufactured items, all of which contribute to the
environmental stress of the region (Chase, 2002; Krist, 2000). Since the 1980s the
intensification of this neoliberal model in Central America along with population
growth has lead to the land area dedicated to agricultural uses increasing by
almost 200,000 hectares per year leading to substantial detrimental impacts on the
environment and dramatic changes in the landscape (OdD-UCR, 2002). This increase in agricultural land area can mainly be attributed to commercial agricultural extensification and intensification practised by large enterprises (as part of the transnational elite and indeed other Central American elites that controlled the domestic markets) although the activities of smallholding peasant farmers have also contributed to these changes (Barton, 2002). In this way, such intensification of agricultural practices under the neoliberal model coupled with high levels of poverty have increased the unsustainable exploitation of land resources, widespread water pollution, soil erosion, sedimentation, land degradation and deforestation; problems which have been building up throughout the years since the region embraced the agro-export model. As a result, the current development paradigm and political vision that has been based on short-term resource extraction has "failed to appropriately value biodiversity and the environment in terms of their contributions to the sustainable development and welfare of current and future generations" (Conservation International, 2004).

Throughout Central America, as Leonard (1987; 117) points out, "the single most important ecological change that is taking place as a result of current demographic pressures and economic trends is the rapid and continuing conversion of forests to other land uses".

Indeed, as Barton (2002; 198) agrees "the greatest threat to natural environments has been the removal of natural vegetation and exposure of top soils". These land conversions not only cause severe land degradation impacts, soil fertility loss and watershed deterioration but they can also threaten the region's biodiversity (Leonard, 1987). With many species threatened by extinction, particularly mammals such as jaguars and pumas, which need large tracts of primary forests to survive, the increasing intensity of these activities could mean that many unique plant, animal and insect species found nowhere else in the world could soon be lost forever (Faber, 1993).
Even protected areas\textsuperscript{39} are critically threatened by encroachment and logging, which further accentuates this biodiversity loss. Whilst forests originally covered almost all of Central America, in 2001 it was estimated that approximately 80\% of the region’s original primary forest formations had been cleared or significantly modified (Conservation International, 2001). Since the 1960s the extent of forest cover in the region has declined from approximately 60\% to a third of the total land area (Utting, 1994). By the middle of the 1990s it was estimated that Central America was losing 2.1\% of its forests each year and although the conditions have improved significantly since then, the region is still clearing an average of 0.44 km\(^2\) of forest every hour, adding up to nearly 40,000 km\(^2\) per year (FAO, 1999; OdD-UCR, 2002). If this rate continues, the UNEP -GEF (1999; 19) have warned that between the years 2005 -2010 only fragments of protected and non-protected wild areas will survive and these fragments may completely vanish by 2015.

The conversion from forest to other uses is not new in Central America; indeed it has been occurring for many centuries and can be attributed to several complex and interrelated causes (Myers and Tucker, 1987). What can be noted is that one of the fundamental forces behind these practices is the increasing pressure on the land by way of clearance for agro-export products and expansion of commercial agriculture, clearance of marginal areas by smallholders (usually by shifting slash and burn agriculture), fuel wood gathering, commercial logging, road building, development projects (e.g. The Plan Puebla Panama - see Chapter 6) and industrialisation etc. (Utting, 1991; Leonard, 1987). Agricultural export production is one of the main drivers of deforestation, especially through clearance of land for cattle ranching for beef exportation and growing crops such as bananas and coffee. The cattle boom in particular in the 1960s triggered a massive increase in forest clearance in Honduras, Costa Rica and Nicaragua due to a high demand for beef from the US, sometimes coined ‘the hamburger connection’ (Nations and Komer,

\textsuperscript{39} According to the IUCN-WCMC (1994; 1) a protected area is “an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means”. Protected areas are a type of interventionist approach towards sustainable development (see chapter 2 section 2.3.1) as there is a recognition of the need for management of natural resources. The term \textit{protected area} includes national parks and all other areas which receive at least some protection.
1987). As a result, large commercial operators displaced peasants into forested areas in search of land for subsistence, accentuating the problem even more. Even though these causes of deforestation may be underpinned by population growth, unsustainable agricultural practices, unequal land tenure systems and weak government policies, essentially these activities are all features of the economic development models that have been in place in Central America since the late 1800s and have in recent decades increased under neoliberalism (Utting, 1991; Richards, 1997).

Another major contributor to environmental degradation is pesticide abuse, which, in the pursuit of increased production under agricultural expansion, has affected the region extensively. According to the CCAD (2002b; 19):

"Central America is the region with the greatest per capita use of pesticides in the world (around 2kg per person per year) and due to poor land management it is on the rise".

However whilst the agricultural extensification, intensification and indeed diversification of crops under the neoliberal model may have increased the use of pesticides within the region, pesticide abuse was also rife during the 1950s and 1960s with the expansion of cotton production. This abuse, according to Faber (1993; 107) caused "long-term contamination of land surface, water tables and food chains". Nonetheless, the more recent expansion of non-traditional exports as part of the transnational model described in the previous section has caused its own problems through, for example, uncontrolled spraying by producers on vegetables and flowers (Lara, 1995). Whilst traditional agriculture has caused such problems as deforestation and loss of biodiversity, soil exhaustion and siltation of surface waters, the risks from non-traditional agriculture, as a result from the shift from extensive to intensive production strategies and increased chemical input have been more closely linked to human health problems (Barton, 2002). Although these inputs may have desired effects on crop protection and productivity, there have been a number of undesired effects such as the accumulation of pesticide residues in crops and long-term contamination of the land surface, water table and food chains with resultant detrimental impacts on flora and fauna and human health (Barton, 2002; Faber, 1993). Cancers, physical deformities and sterility in
human populations have also been traced to pesticides (Lara, 1995). Poor disposal of waste and sewage, especially around urban areas where treatment facilities may be poor, along with this extensive use of deadly pesticides, has also contributed to the contamination and pollution of water in Central America. Approximately 80% of the sewage from urban zones is discharged into rivers and other water sources throughout the region. Calculations of solid waste output indicate that Central America produces some 19,000 tonnes of waste each day, of which 50% is collected, the rest remains scattered in rivers and coastal areas (CCAD, 2002b). These problems can be attributed to the lack of state spending (which can be related to the reductions in state spending central to the neoliberal reforms enacted over recent years) and the presence of weak institutional structure and legal frameworks in Central America, which have hampered law enforcement and efficient urban development planning (Conservation International, 2004).

Coastal areas have also experienced an increase in destruction and degradation of crucial habitats since the 1980s, a pattern which has intensified under the neoliberal model. For example, the rate at which mangrove ecosystems have been harvested, removed due to coastal development or damaged by pollution has increased significantly, especially along the pacific coast (Leonard, 1987). Exploitation of the region's coastal zone habitats and fisheries including the Mesoamerican and Caribbean Reef is another environmental problem that has become more prominent (WWF, 2003). Overfishing by commercial operators in these areas has led to massive depletion of fish stocks mainly with the intensification of commercial activities (Leonard, 1987). The sea turtle too (Green, Hawksbill and Pacific Ridley) has become extremely vulnerable as a result of heavy exploitation of marine resources (WWF, 2003). Not only are there problems associated with direct extraction of resources in these coastal areas, but rapid development of tourist destinations during the late twentieth century especially on the Caribbean side of Central America has contributed to land use change and pollution (Barton, 2002). With tourism becoming more popular in Central America, especially in Costa Rica40 (see table 3.3), it is important that it is managed...

40 According to Honey (2003: 40), “by 1993 tourism had become Costa Rica's number one foreign exchange earner, surpassing coffee and bananas”.

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in such a way so as to mitigate adverse environmental impacts e.g. pollution, destruction of ecosystem to make way for hotel construction etc. Indeed, with ecotourism in particular, it is essential that the emphasis is placed on the “eco” rather than the “tourism” and that tour operators promote “responsible travel to natural areas that conserves the environment and improves the welfare of local people” (Honey, 2003: 42).

**Table 3.3 - Costa Rica’s Tourism Growth**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrivals (in thousands)</td>
<td>299</td>
<td>372</td>
<td>274</td>
<td>261</td>
<td>435</td>
<td>611</td>
<td>761</td>
<td>1088</td>
<td>1113</td>
</tr>
<tr>
<td>Gross receipts (in millions of US dollars)</td>
<td>57</td>
<td>131</td>
<td>117</td>
<td>133</td>
<td>431</td>
<td>626</td>
<td>718</td>
<td>1229</td>
<td>NA</td>
</tr>
</tbody>
</table>

Adapted from Honey (1999) and ICT (2006)

With the neoliberal model firmly in place, the environmental problems of the region described above are intensifying. However, whilst these problems have been intensifying, an awareness amongst international, regional, national and local actors has grown as to the consequences of such environmental destruction. This awareness has resulted in many different responses to the mounting regional environmental crisis. For example there have been a whole range of different environmental policy initiatives by the region’s governments as well as the growth of more autonomous political groups such as NGOs and grassroots movements some of which have initiated their own projects to try and deal with environmental issues. However, rather than simply occurring as a reaction to the failures of neoliberalism to adequately respond to the environmental challenges faced by Central America, these responses have developed at the same time as neoliberal ideas have been consolidating themselves as the dominant perspective on development in the region. As such, it is important to consider how neoliberalism has influenced the growing attention being paid to environmental issues in the region as the two have developed side by side since the economic
crisis of the 1970s that engulfed the region. The next section discusses in more detail the evolution of responses to the environmental crisis with particular emphasis on the upsurge of environmental policies that have been drawn up in the region.

3.4 Environmental Policy and Planning in Central America

Since the early 1980s, as discussed in the preceding sections of this chapter, the countries of Central America have promoted a development model that has further intensified the depletion of many of their natural resources. Furthermore, the indices of poverty have not abated and social inequities have grown over the same period, revealing that this development model has not been sustainable over time (OdD-UCR, 2002). The peace processes of the 1990s and the democratisation of the region provided a new political space where environmental issues could be given greater prominence and which brought about a growing recognition amongst both states and more autonomous actors the seriousness of some of the environmental challenges facing the region. For example, the Central American governments have responded to the environmental crisis with a plethora of environmental policies. This government interest in tackling environmental change can be related to the broader growth of interest in the environment occurring globally. At the same time, there has also been a growing presence of disparate environmental political movements across the region reflecting the involvement of international environmental NGOs and more autonomous local and regional environmentally oriented organizations and social movements. International Financial Institutions, such as the World Bank for example, have also played their role in raising the profile of environmental issues in the region, particularly through their funding of institutional strengthening programmes and other project-based lending in the environmental field.

As discussed in chapter 2, however, the malleable meanings of the whole idea of sustainable development and its oxymoron nature has meant that these different actors, depending on how they view the concept, have tackled environmental issues in markedly different ways. For example, the neoliberal way of thinking is
reflected most in the environmental policies that have been created by institutions within the region (see below). On the other hand the responses of the more autonomous political movements such as NGOs which have grown up around the region, whilst in pursuit of techocentric and ecocentric approaches towards dealing with the environmental crisis (see chapter 2 section 2.3.3), in many cases reflect the more radical variants of sustainability. However, it is important to note that not all of these autonomous groups reflect such radical interpretations of the concept. As chapter 7 discusses, the NGO sector is a heterogeneous, which has meant that not all of these organisations have evolved in the same manner. In this way, some NGOs and particularly those that operate at the international level, have become entangled within the neoliberal agenda because their donors, which in many cases are IFIs and outside neoliberal governments, have dictated where their money is to be spent. This has caused a great deal of debate about the legitimacy and democratic credentials of these NGOs.

Environmental issues started to become a more important theme on the political agenda in Central America, following the Rio Earth Summit in 1992 (see the earlier discussion on Rio in chapter 2 section 2.2). This marked a milestone for the growth of the region’s environmental institutions inspiring governments to reach a number of regional agreements for biodiversity conservation, protection of priority natural areas and forest management (Miller et al., 2001) (see table 3.4). However just two years later the permeation of neoliberal ideologies into these debates was demonstrated when governments reconvened in Marrakech, (in conclusion to the Uruguay Round of the GATT) to discuss ways in which natural resources could be made profitable. This brings us back to the ideas of market environmentalism and nature commodification explored in chapter 2 (section 2.3.2).
Prior to this summit, a general recognition of the environmental impacts of existing development strategies had already started to evolve in Central America. Both the governments of Costa Rica and Nicaragua for example (as will be explored in more detail in chapter 7) assigned their first protected areas in the early 1960s and 1970s in order to protect their natural resources. The wider region, too, had also started to establish regional agreements to promote environmental protection and sustainable development (OdD-UCR, 2002). In 1974, at the First Meeting of Natural Patrimony, held in San Jose, Costa Rica, the first map detailing the most important conservation areas within Central America was developed (CCAD, 2002c). In 1987, the second Central American Meeting for the Conservation of the Natural and Cultural Patrimony was held in Guatemala, and this resulted in the creation of protected areas in all countries involved to form the Central American Protected Areas System (SICAP) (CCAD, 2002c). This was set up to be used as “a tool for conserving the region’s rich biological diversity” (SICAP, 2003). That year, less than 8% of the region was under any type of environmental protection. However, within three decades (1980s - present)
Mesoamerica had passed from having 25 declared protected areas to more than 400, which cover 22% of the total surface of the territory. Today there are approximately 597 legally declared protected areas and some 160 proposals still being considered (Table 3.5) with 79 of the latter areas managed by civil society (CCAD, 2002c; CCAD, 2002a). According to the CCAD (2004; 19);

"the establishment of SICAP has been seen as an adequate strategy for conforming conservation efforts in the region, since the countries have reported significant differences in their legal and institutional frameworks as well as in their forms of financing, planning, administering, managing and monitoring their protected areas".

Indeed, it has been this lack of uniform management policies for national systems of protected areas within the region, which has contributed to ineffective management for biodiversity conservation (UNDP-GEF, 1999). Interestingly though, whilst SICAP may attempt to overcome national deficiencies in management within the region, it is worth questioning whether or not this rather top-down approach and over-centralised approach towards the conservation of protected areas is working effectively and whether or not it has been the best tool to adopt (chapter 5 will discuss the impacts of a sustainability initiative which utilises SICAP as its backbone).

Table 3.5 - Protected areas of Mesoamerica

<table>
<thead>
<tr>
<th>Country</th>
<th>Declared Protected Areas</th>
<th>Declared areas Total Surface (km²)</th>
<th>% of National Surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico*</td>
<td>29</td>
<td>38,902</td>
<td>16.5</td>
</tr>
<tr>
<td>Belize</td>
<td>59</td>
<td>10,291</td>
<td>48.0</td>
</tr>
<tr>
<td>Guatemala</td>
<td>104</td>
<td>28,658</td>
<td>26.0</td>
</tr>
<tr>
<td>Honduras</td>
<td>106</td>
<td>21,339</td>
<td>18.0</td>
</tr>
<tr>
<td>El Salvador</td>
<td>3</td>
<td>343.13</td>
<td>2.0</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>76</td>
<td>30,126</td>
<td>24.0</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>151</td>
<td>12,576</td>
<td>25.0</td>
</tr>
<tr>
<td>Panama</td>
<td>69</td>
<td>22,260</td>
<td>29.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>597</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Only includes the nine states of south-eastern Mexico

Source: CCAD (2002c)

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41 Mesoamerica comprises the 7 Central American countries as well as the nine southeastern states of Mexico (Campeche, Chiapas, Guerrero, Oaxaca, Puebla, Quintana Roo, Tabasco, Veracruz, and Yucatán).
Although institutional environmentalism was starting to gain momentum towards the end of the 1980s, declarations of parks and reserves did not guarantee the solution to the environmental or social problems in the region (CCAD, 2002c). At this time, however, as we saw earlier in the chapter, a new generation of pluralist governments restored the rule of law and rebuilt democratic institutions, which according to the CCAD (2002a; 23) “lay the groundwork for injecting new life into the idea of integration, starting with a common strategic vision throughout the region”. This integration process was to provide opportunities to develop a new regionally co-ordinated approach to environmental governance. In 1989, following the Esquipulpa II Peace Accords, the Presidents of Costa Rica, Nicaragua, Honduras, El Salvador and Guatemala, expressing an awareness “of the need to establish regional cooperation mechanisms that would guarantee the rational use of natural resources, control contamination and re-establish the areas ecological equilibrium”, signed the Constitutional Convention of the Central American Environment and Development Commission (Comison Centroamericana de Ambiente y Desarrollo or CCAD) (SICAP, 2003; 6). Belize and Panama then joined later with Mexico and the Dominican Republic as observers of the Commission’s environmental aspects (SICAP, 2003). The CCAD is a regional entity whose purpose is to strengthen cooperation among national bodies responsible for managing natural resources and the environment, facilitating and promoting activities in the environmental field. It is constituted by the state authorities of member governments involved in environment or natural resources (CCAD, 2002c). Its main objectives are to harmonise policy guidelines and national legislation and to consolidate national systems of protected areas, buffer zones and biological corridors (CCAD, 2002a; CCAD, 2003a). It is interesting to note here that the CCAD was created at a similar time as the launch of the SAPs in the region and the rise of neoliberalism as the dominant economic model. This means that it is highly likely that the policies and outlook of the CCAD have been heavily influenced by the neoliberal agenda adopted by the region’s governments and imposed by outside institutions such as the World Bank.
The CCAD is an entity of a larger regional governmental body known as the Central America Integration System (SICA). SICA acts as the execution arm of the Central American integration process which was activated in 1991 with the signing of Tegucigalpa Protocol\textsuperscript{42} by the Central American presidents (CCAD, 2002b). Comprised of all seven countries, SICA began functioning in 1993 with its headquarters based in El Salvador (CCAD, 2002b). According to Calvo-Drago (ND) "the long term objective of SICA is to transform Central America into a region of peace, liberty, democracy and development". SICA's superior intergovernmental decision-making bodies are the Summit of Presidents and the Council of Ministers, which are empowered to make regional decisions in the areas of democracy, development, freedom, peace and security. SICA is also comprised of community organisations such as the Central American Parliament, the Central American court of Justice and the General Secretariat of the Integration System as well as specialised agencies that focus on matters such as health and nutrition, telecommunications, development banks, industrial technology etc (Calvo-Drago, ND; CCAD, 2002b). Today, as Calvo-Drago (ND) points out, "the challenges of the Central American Integration are those of building integration simultaneously with an insertion into a global economy". Clearly the identification of these so called 'challenges', which SICA faces itself with, reflect the neoliberal underpinnings of the whole SICA project (i.e. the purpose of integration is to better pursue integration into the global economy).

Clearly regional institutions such as SICA are designed to appeal to the international institutions current funding priorities (e.g. trade liberalization, integration into global markets etc.). This has taken on even greater significance for the region in the context of a significant decrease in the flow of external financial resources into the region. It is ironic that this decrease occurred at a time when the region was coming out of a pronounced period of economic and political turmoil, fueled by the massive financial and military intervention of the United States.

\textsuperscript{42} The Tegucigalpa Protocol seeks to "consolidate a new regional security model based on a reasonable balance of power, strengthening civilian authority, overcoming extreme poverty, promoting sustainable development, protecting the environment, and eradicating violence, corruption, terrorism, drug trafficking, and arms trafficking" (Vizcarra, 2002).
States, and needed significant investment to aid reconstruction and recovery. As Calvo-Drago (ND) emphasised at the time,

"the flow of external cooperation should at least be maintained if not increased for a reasonable time, in order to help Central Americans to achieve sustainable and integral development".

This suggests that Central American nations were keen to target areas that would boost external investment in the region; the environment was seen as one of these key areas.

Approved one year after SICA’s creation was what, according to the CCAD (2002b; 21):

"constitutes Central America’s greatest comprehensive initiative in political, cultural, economic, social and environmental spheres; the Central American Alliance for Sustainable Development (ALIDES)".

Signed in 1994, ALIDES was launched in Managua within the SICA framework of the and with the CCAD as one of its driving forces (CCAD, 2002b). ALIDES43 is a plan to promote peace, consolidate democracy, and protect the environment and has committed the governments of the region to a series of environmental measures, including the consolidation of SICAP and the establishment of a comprehensive system of biological corridors (Miller et al., 2001). As such, ALIDES specifically advocated the creation of a regional biological corridor in order to strengthen the respective national systems of protected areas (UNDP-GEF, 1999). To help with the implementation of ALIDES, the Central American Fund for Sustainable Development (FOCADES) was created in 1997 as a regional financial mechanism with the aim of attracting and administering resources to promote and improve environmental management and sustainable development (CCAD, 2002a). Comprising specialised accounts, the fund aims to focus on financing regional and national projects with relevance in areas of protection of international

43 The concept of sustainable development as expressed in ALIDES is "a process that pursues change in the quality of human life and that places human beings as the central and primary target of development. This is achieved through economic growth with social equity and the changes in production and consumption patterns, based on ecological equilibrium and the support of the region. This implies respect for regional, national and local ethnic and cultural diversity, and the enhanced and full participation of all citizens, living peacefully and in harmony with nature, not jeopardising but rather ensuring the quality of life of future generations" (CCAD, 1994: 19).
waters, conservation of biodiversity and mitigation of climate change (UNDP-GEF, 1999). Inspired by ALIDES, therefore, the CCAD (2002b; 24) believe that;

"Central America has created and strengthened national environment and development institutions, and today there is an authority responsible for environmental administration in each country".

However, whilst spanning a whole range of sectors and indeed objectives, ALIDES seems to be quite ambitious in what it sets out to do. At the same time, when looking at the ALIDES areas of action (table 3.6), it is possible to detect the neoliberal undertones of the initiative, especially with its focus on 'economic and financial projects' and the 'proposed integration of Central America into the North America Free Trade Agreement'. In this way, it is worth questioning how the environment slots into such initiatives. Could it be that neoliberalism has influenced the direction of such regional sustainable development initiatives in a way that now nature in Central America is merely viewed as a product or an asset to the global economy rather than anything with an intrinsic value?

Table 3.6- ALIDES areas of action

1. A revision, harmonisation and strengthening of national, regional legislation, including the consideration of more effective coordination between Central America and the United States in the enforcement of legislation regulating transboundary movement of hazardous substances and wastes;
2. Economic and financial projects, especially involving commerce, investments, foreign aid, debt settlement, and technical assistance in evaluating natural resources and developing cleaner technologies, as well as the proposed integration of Central America into North American Free Trade agreement (NAFTA);
3. The development of alternative sources of energy; increased efficiency in production, and a greater commitment by lending agencies to funding sustainable energy projects;
4. The appraisal, conservation, and utilization of biological and cultural diversity.

Source: Illueca (1997)

However, despite the influence that neoliberalism may have on the direction that environmental policy making has taken within the region, Central America governments have still achieved a great deal in the way of institutional strengthening amongst government bodies, the establishment of regional
agreements and the drawing up of national level environmental legislation etc. Whilst this institutional strengthening and the signing of agreements may not guarantee the protection of Central America's environments, at least the CCAD, since its creation in 1989, has brought environmental issues to the forefront of the political agenda, both regionally and nationally (CCAD, ND). Not only was Central America one of the first regions to ratify the Kyoto protocol in 1997, but it was also the first to enter the carbon market as part of a pilot phase of the Framework Convention on Climate Change, through the Joint Implementation Initiative. Since then, the region has developed around 20 projects for mitigation, adaptation, energy efficiency and renewable energy within this Joint Implementation Framework. In relation to biodiversity, all seven countries have prepared a national biodiversity strategy (ENB) under the Regional Strategy for Conservation and Sustainable Use of Biodiversity in Mesoamerica (ERB) and have been working to draft specific laws in this area. Advances have also been made in the field of environmental management, strengthening natural resource administration. To help protect the forests of the region, the Forestry Sector is soon to be launching the Central American Forest Strategy (CAFS). To protect and manage wetlands, in July 2002 regional governments approved the Central American policy for Conservation and wise use of wetlands (CCAD, 2003b; CCAD, 2002b). Additionally, in 1997 the Presidents of Central America approved the creation of the Mesoamerican Biological Corridor (MBC), with the inclusion of the five southeastern states of Mexico (OdD-UCR, 2002) (see chapter 5) as well the Project for Conservation and Sustainable use of the Mesoamerican Barrier Reef System. The Environment Plan for the Central American Region (PARCA) is one of the main instruments orienting work on these issues and guides the countries' work with respect to the environment and sustainable development. Approved by ministers in 1999, PARCA outlines the medium and long-term objectives and strategies for four strategic areas of environmental action: clean production, forest and biodiversity, water and environmental management. The promotion and implementation of PARCA is one of the CCAD's chief tasks in the region as is the Mesoamerican Biological Corridor (section chapter 5) (CCAD, 2002b).
From the preceding discussion, it is clear that Central American governments have indeed responded to the mounting environmental crisis albeit from a particularly top-down and in many cases a neoliberal approach. The growth of such institutional responses has come about for a mixture of reasons; an actual desire to protect the region’s environments from individuals or indeed sectors of the government e.g. the Ministries of Environment; the need to respond to the growing external pressures to address the region’s environmental destruction; the search for the external finance available in environmental arenas by Central American governments; and the influence of a growing environmental awareness amongst the region’s peoples (evidenced in the growth of local environmental NGOs and environmental political movements). However, regardless of the region’s response and the reasons behind it, environmental pressures still seem to be growing. According to a document prepared by the UNEP-CCAD (2004; 32):

“recent estimations indicate that in almost two thirds of Central America (62.7% of the territory), ecosystems are in a critical state (11.4% of the territory) or in danger (51.3% of the territory), as a consequence of both human and natural pressures”.

With such patterns continuing it would therefore seem that there has been little change in the region’s development priorities since the evolution of institutional environmentalism. Indeed, the main priority for Central American governments and the IFIs that operate within the region still seems to be the ongoing pursuit of economic growth through the increasing integration of the region into the global economy; a priority which by no means favours environmental protection or the welfare of the local people. For all of the regional and national environmental initiatives discussed in this chapter, the over-riding rationale for environmental management within this neoliberal framework, is to commodify nature (see chapter 2) by pricing its services, assigning property rights, and trading these services within the global market (Daily 1997; Roberts and Thanos, 2003). With IFIs having an increasing hold over the region, especially with the downsizing of states, the Central American governments now may have less influence over the direction of their environmental agendas including the implementation of regional sustainability initiatives such as the Mesoamerican Biological Corridor. Having discussed in previous chapters the evolution of the sustainable development
concept as well as the economic and environmental background of the Central American region, the next section outlines the main aims and objectives of the thesis, and how the Mesoamerican Biological Corridor will be utilised to explore these issues further.

3.6 Aims and Objectives of This Thesis
The thesis explores in detail ways in which the idea of sustainable development has been adopted and embraced amongst regional, national and local actors within the Central American region, looking more specifically at the impacts that economic development strategies have upon regional conservation efforts. These issues will be explored through the detailed examination of the Mesoamerican Biological Corridor (MBC) (chapter 5) - the largest and most important 'sustainability' initiative in Central America which spans the whole region. By exploring the MBC in more detail it will be possible to investigate how it can be situated within current debates about sustainable development and how neoliberalism has served to direct or influence the initiative. At the same time particular attention will be focused on how the MBC is related to the Plan Puebla Panama (PPP) (chapter 6), a contemporary economic initiative that is also being implemented in the region, and the Dominican Republic-Central American Free Trade Agreement (chapter 6) and how these economic strategies have affected the ownership and direction of the corridor. The environmental movement in Central America has not just been at the institutional level; NGOs and civil society have had significant roles to play, both in the political arena and in the field. Their importance and influence upon the MBC, therefore, through looking at the contrasting examples from Costa Rica and Nicaragua, will be explored more in chapter 7.

The specific objectives of this research are to:

1. Identify and explore the meanings and interpretations of the concepts of sustainability that have been adopted by organisations involved in the
implementation of the MBC and how and why these meanings have changed over time.

2. Identify the ownership of the MBC and assess the effectiveness of its governance in the light of the relationships among the MBC, international institutions and neoliberal governments outside Central America;

3. Determine and evaluate the potential impacts of the PPP and DR-CAFTA on the achievements of the MBC and to investigate the relationships between the initiatives;

4. Explore and evaluate the roles of the non-governmental sector and other autonomous groups in the MBC;

5. Understand how the MBC operates at both the national and local level drawing upon examples from Costa Rica and Nicaragua;

6. Consider the future viability of the MBC and whether it is an effective model for the sustainable development of natural resources.
4. Methodology

"To acquire knowledge, one must study; but to acquire wisdom, one must observe"

~ Marilyn vos Savant

4.1 Introduction

In terms of the particular methodologies adopted for meeting the research objectives outlined at the end of the preceding chapter, it was decided relatively early on within the research that this study would be based upon the use of a range of qualitative research techniques (mainly semi-structured interviews) focussing on key respondents at different spatial scales including international, regional, national and local. These types of research techniques, reflecting the shift away from the spatial science agenda of the 1960s have, in more recent years, formed a central part of investigations by geographers (Robinson, 1998b). As Dwyer and Limb (2001; 6) point out, qualitative methodologies utilise an in depth intensive approach, rather than a numerical approach, and aim to understand "lived experience and to reflect on and interpret the understandings and shared meanings of peoples everyday social worlds and realities". It was decided not to implement a more numerical approach e.g. questionnaire surveys of organisations' views on the MBC or statistical techniques to measure the success of the initiative in meeting specific conservation or economic goals, as these would not have aided in meeting the study's major aims of exploring the impacts of differential understandings and interpretations of the concept of sustainable development on the evolution of environmental policies and agendas (with a particular focus on the MBC) within the Central American region.

The foundations for the elaboration of this project were laid through tracing international interpretations and debates on sustainability within an exhaustive review of a wide variety of sources including books, published papers, and the major policy documents of international institutions, think-tanks and NGOs. On the basis of this foundation, regional, national and local scale data focusing on

44 An analysis can be qualitative whenever there is not a numeric translation of data (del Barrio, 1999).
how these debates have been played out in Central America in general and Costa Rica and Nicaragua in particular were then obtained by conducting interviews with a wide range of respondents from different sectors and by analysing a comprehensive collection of relevant secondary data sources. During the research period, therefore, eleven months (October 2004- September 2005) were spent living, collecting data and researching these issues in Central America. Also in order to get closer to the data and enable the conduct of interviews, ten months were spent studying Spanish in the UK prior to departure and on arrival in the region the author undertook a further intensive Spanish language course. The research period also allowed for contact to be made with the appropriate organizations and institutions, and provided the opportunity for full immersion into the political debates about the issues associated with the research and the exposure to different schools of thought and opinions which would have been impossible from a remote study.

Whilst the initiatives under investigation have a predominantly regional Central American emphasis, it was also important to focus the study down and explore their impacts at the national and local levels and so Costa Rica and Nicaragua were selected as case study countries. These particular countries were selected for a number of reasons. First, it was important to choose representative countries within the Central American region that have divergent experiences (politically, historically, environmentally etc) because this would ultimately impact their uptake of the MBC initiative and affect their attitude towards sustainable development. For example as chapter 7 goes on to explain, Costa Rica has a strong international reputation for taking environmental issues seriously, whereas Nicaragua has not had a strong record on the development of effective conservation strategies or the enforcement of those environmental laws that have been enacted. Second, on a more logistical note, contacts were facilitated in both countries via the author’s supervisor as well as through the author’s involvement with a UK-based NGO working in Masaya, Nicaragua. Also the fact that the countries share a border allowed for easier and quicker access between them. Within both Costa Rica and Nicaragua, local level studies were conducted in and around national parks and protected areas. Two local level studies were
conducted in Costa Rica in different geographical locations, one in the south west of the country on the Atlantic side and one in the north east of the country on the Caribbean side, enabling a potential cross section of different community responses towards the MBC initiative. With there being a series of security concerns in Nicaragua, eventually only one protected area case study was conducted in the north of the country.

4.2 Collection and Analysis of Documents

The collection and analysis of documents has been a central thread to this research which has not only aided the contextualisation of the primary research but has also enabled the positioning of this research amongst broader literature (Aitken, 2005; Clark, 2005). Information not available in the UK or electronically, such as the publications and internal documentation of regional institutions, national and local governments, international and regional NGOs and newspaper articles were obtained during the 11 month field period spent in Central America from the documentation centres of individual institutions/organizations, university libraries and public archives. Many of these were translated from Spanish into English for the purposes of this research before being analysed. Information obtained from the documents was then organised into themes similar to those used for the analysis of the interviews (such as mechanics and change of the MBC over time, MBC institutionality, impacts of the PPP on the MBC etc - see table 4.2 in section 4.5 of this chapter) that related back to the theoretical framework explored in chapter two.

With the research being largely contemporary in focus, few published peer-reviewed articles on the initiatives which form the major focus of the thesis are available. There is, however, a vast quantity of data available on the World Wide Web pertinent to the study, including documents made available by governments and other national and international institutions, NGOs and online journals. Unfortunately, however, the World Wide Web can be considered a double edged sword when it comes to information; not only does it hold a vast wealth of material that is globally accessible but it is a source that is largely unregulated as
anyone can put information up on the web without it being checked by independent or neutral parties (Clark, 2005). It is recognised that although the World Wide Web is a valuable resource giving access to a wealth of data, policy information and opinions on the topics under consideration in this research, not all the materials available are quality assured and very partisan or biased positions may be presented. For example, material from online journals is usually peer-reviewed and international institutions host documents vetted or approved by various factions, and might be considered, if not well-balanced, then at least to set the context for their position. In contrast, material posted by campaigning groups, some NGOs or newspapers may reflect particular and sometimes very biased positions, which can have insufficient context or supporting evidence. For this reason it is important to recognise and indeed exercise caution over the fact that different types of web sources reflect different levels of attention to accuracy and robustness. This does not necessarily mean that only peer-reviewed material was useful for this study but rather that other materials have been useful for different purposes e.g. the use of the web sites of campaigning organizations can be used to indicate the concerns being raised about the direction of dominant policy frameworks, policies etc.

4.3 Interviews

Primary data were collected through the conduct of semi-structured interviews; a technique which allows for focused, conversational two-way communication that aims to capture the interests, experiences and views of the interviewees about a particular topic or a practical task (FAO, 1999; Valentine, 2005; del Barrio, 1999). Unlike the fixed framework of a questionnaire where detailed questions are usually prepared beforehand, semi-structured interviews as a research technique, given its more open framework, enabled the researcher to start with more general questions or topics and move onto more specific questions which may not have been necessarily prepared in advance (FAO, 1990). For example, when MBC representatives were interviewed, the author commenced with a more general questioning about the history and background of the MBC, and then, once the scene had been set, it was possible to probe for details or discuss issues further e.g.
the link between the MBC and the PPP. In this way, the use of interviews, which arose from a need to deepen our understanding of the evolution of the MBC, provided the researcher with a richer account of events than if larger scale standardised statistical approaches had been used (Herod, 1993). The use of semi-structured interviews in this research also allowed for the collection of information not available elsewhere, clarified the motivations behind projects and how they are being implemented, revealed alternative viewpoints on particular topics and enabled access to people’s experiences on the ground. e.g. talking to the Minister of the Environment of Costa Rica enabled access to information not freely available in the public domain and allowed the author to probe more about the motivations informing policy decisions.

Although primary data form a major component of this research they cannot be viewed in isolation of the secondary data. Previous textual analysis, therefore, by providing the background on which the primary data is based, enabled the appropriate selection of interviewees to be made as well as the type of the questions to be asked (see below) (Clark, 2005). When recruiting informants as Valentine (2005; 112) points out “the aim is not to choose a representative sample but an illustrative one”. For example, in order to understand how the MBC, the PPP and DR-CAFTA have been interpreted from the international to the local scales, it was important to interview a variety of different stakeholders across this spatial spectrum who were able to express their differing views and opinions etc. In order to fulfil the research questions set out in the preceding chapter, therefore, interviews at the regional and national level were held with key actors involved with the MBC, DR-CAFTA and the PPP in both countries45, including government officials, NGO and UN representatives (see table 4.1). Such interviews were usually held in the capital city of either Costa Rica or Nicaragua (San Jose and Managua respectively). Interviews at the local level46 were held in communities around three protected areas (Tortuguero National Park and Corcovado National

45 In Costa Rica the total number of interviews conducted at the regional and national scale was 37 between November 2004 and April 2005. In Nicaragua the total number of interviews conducted at the regional and national scale was 12 between April 2005 and June 2005. One regional interview was conducted in Guatemala in July 2005.

46 A total of 33 interviews within communities around two protected areas were conducted in Costa Rica and a total of 11 interviews were conducted within communities around one protected area in Nicaragua.
Park in Costa Rica and Miraflor Reserve in Nicaragua – see map 4.1) where local NGOs, indigenous communities, campesino organisations and cooperatives, ecotourism businesses and protected area representatives were interviewed (see table 4.1). The interviews held with actors at the local scale were not only less formal than those held at the regional and national scale, but the type of questions asked also differed. For example, the interview themes at regional and national scale focused around clarifying the nature of the initiatives in question and their relationships between one another, whereas at the local scale, the themes were more related to the personal experiences of stakeholders and their views of local participation in conservation and the involvement of the government etc. The questions asked during local level studies provided insight into the functionality of the MBC on the ground (see aims and objectives Chapter 3 section 3.6 and 3.7).
Figure 4.1 - Locations of case study protected areas and city bases in Costa Rica and Nicaragua
Table 4.1 - Interviews conducted for Research

Costa Rica

Government Agencies
5. Dr Fredy Miranda - PROSIGA (CCAD) - 7th January 2005.
6. Ex-High Functionary MBC (requested to be anonymous) - 20th January 2005
7. Albero Ulgade - Director ACOSA - 27th January 2005

United Nations
1. Pascal Girot - Environmental Risk Advisor, UNDP - 24th November 2004
2. Olga Corrales - Environment Program Officer UNDP - 24th January 2005

NGOs
1. Gustavo Oremuno - Ditso - 4th November 2004
4. Diana Juskovsky - Director Rainforest Alliance Costa Rica - 12th November 2004
7. Sylvia Miran - Director WWF Central America - 18th November 2004
8. Alejandro Alvarez - Conservation International - 26th November 2004
10. Vera Varela - Director Fundacion Neotropica - 6th December 2005.
11. Luis Felipe Vega Monge - Director Junta Nacional Forestal Campesina - 6th December
14. Andrea Meza - CEDAREN - 7th January 2005
15. Alfonso Barrantes - Director Oficina Nacional Forestal - 12th January 2005
16. Grace Garcia - COECO Ceiba - 18th January 2005
17. Alberto Chinchilla - ACICAFOC - 27th January 2005
18. Alejandra Monge - Fundacion Corcovado - 18 February 2005
19. Edgar Silva - Mesa Indigena - April 13th 2005

International Financial Institutions and Multinational Corporations
1. Roy Barboza - CABEI - 13th January 2005
2. Marcelo Valensuela - SIEPAC (IADB) Co-ordinator - 17th January 2005
4. Matthew Tank - Infrastructure specialist IADB - 21st January 2005
5. Rodrigo Jimenez - General Manager PINDECO (Delmonte Group) - 26th January 2005

**Academic**
1. Dr Ceila Harvey - CATIE agroforestry specialist - 15th April 2005
2. Dr Francisco Alpizar - CATIE environmental economist - 28th June 2005
3. Dr Brain Finnegan - CATIE biodiversity specialist - 28th June 2005

**Local Communities around Protected areas**

*(a) Tortuguero*
1. Thomas Bailey - village elder - 9th February 2005
2. Ryan & Christy Matthews - Peace Core volunteers - 12th February 2005
3. Olman Alvarado - manager Mwamba Lodge - 10th February 2005
4. Mario Garcia - COTERC (Canadian Organisation for Tropical Education and Rainforest Conservation) - 8th February 2005
5. Marie Ellos - woman’s group - 5th February 2005
6. Jenny Madden - small hotel owner - 10th February 2005
7. Hernan Doblado - teacher at high School - 10th February 2005
8. Francisco Torres - village elder - 10th February 2005
9. Edwin Calderon - park ranger - 11th February 2005
10. Dr Emma Harrison - biologist (Caribbean Conservation Corporation) - 22nd October 2004
11. Daryl Loth - tourist guide and biologist - 5th February 2005
12. Caster Hunter - tourist guide - 7th February 2005
13. Bonnie Scott - tour operator - 7th February 2005
15. Barbara Hartung - biologist/ guide - 10th February 2005
16. Antoinette Gutierrez - souvenir shop owner - 7th February 2005

*(b) Corcovado*
1. Tom Boylan - owner of organic finca - 2nd March 2005
2. Ricardo Kogel - The Nature Conservancy Osa Peninsula - 3rd November 2004
3. Rebecca Gomez - tour guide at Casa Corcovado - 24th February 2005
4. Paul Collar - restaurant owner - 4th March 2005
5. Mirega Chaverria - villager La Palma - 6th March 2005
6. Mike Boston - tour guide/ zoologist - 3rd March 2005
7. Luis Siles - manager Casa Corcovado - 24th February 2005
8. Lucas Solano - restaurant owner La Palma - 6th March 2005
11. Jonus Spahm - Director Friends of Osa Campaign- 5th March 2005
12. Joel Stewart - lodge owner - 4th March 2005
15. Eliecer Arce - Director of ACOSA and Corcovado National Park – 3rd March 2005
16. Carlos Morena - head waiter Casa Corcovado - 23rd February 2005
17. Alselmo Mendoza - secretary of the indigenous association Peninsula de Osa - 6th March 2005

Nicaragua

Government Agencies
1. Lorenzo Cardenal - Ex Director MBC - 5th May 2005
2. GTZ Representative Managua (MBC) (requested to be anonymous)- 10th June 2005
3. Danilo Saravia - Impact assessor MBC - April 21st 2005
4. Maria Rivas - MARENA (Director of commerce & environment) - 11th May 2005
5. Maria Abaumza - CBA MARENA - 11th May 2005
7. Gioconda Castillo - PPP commissioner of Nicaragua's (Ernesto Leal) assistant - 10th May 2005
8. Albaro Porta - Ministerio of Hacienda y Credito Publico - 3rd May 2005

NGOs
1. William Rodriguez - Centro de Estudios Internacionales - 22nd April 2005
2. Maritza Rivera - USAID Environmental Officer - May 5th 2005
3. Clemente Martinez - Centro Humboldt - 17th may 2005

Academic
1. Donald Mendez - Universidad Centroamericano Managua -28th April 2005

Local Communities around Protected areas
(a) Miraflor
1. Adolfo Valasquiz - campesino Miraflor- 3rd June 2005
2. Arlen Jose Pinell – tour guide - 5th June 2005
3. Corina Picado - lodge owner - 6th June 2005
4. Edgar Castillo - INFOC Director (Instituto de Fomemnto al Comercio) - 31st May 2005
5. Francisco Guiterrez - coffee farmer - 5th June 2005
6. Francisco Munoz - general manager UCA Miraflor - 8th June 2005
7. German Ramirez - Foro Miraflor - 31st May 2005
8. Juan Antonio Romero - flower grower for export - 7th June 2005
10. Lucia Acuna - Village Elder - 3rd June 2005
11. Rolando Talavera - Marena technician Miraflor - 7th June 2005

To help kick-start the research process, key interviewees within organisations and institutions were contacted via email before leaving for the field in order to schedule appointments for interviews. Indeed, having contacts at the University of
Costa Rica also helped with gaining access to potential interviewees. However, although, a contact list had already been collated, as Herod (1999; 315) points out “in practice simply arranging an interview can itself be an extremely challenging ordeal”. It was found that in some cases, potential interviewees that were contacted rarely responded to the email requests and so it became necessary to organise appointments over the telephone. Sometimes even then, having left messages with respective secretaries, potential interviewees did not return the calls especially with government officials for example. In these cases, after much persistence, it was possible to organise a time and date for an interview, which would usually be held in the interviewee’s office. Occasionally, even when a meeting had been scheduled sometimes the interviewee would forget that they even had an appointment. In these cases, appointments were rescheduled by persevering on the telephone and sometimes with a visit to the office itself to speak to the secretary in person (Howard, 1997). With the interviews conducted within communities around protected areas, the process of arranging was much more straightforward, as once contact was made with the interviewees, the interviews were either conducted immediately or maybe a few hours later when they had a slot in their day. These interviews were usually conducted in people’s homes or in cafes. At all levels of the spatial spectrum during the research process, after the first few interviews had been conducted, it was possible to request for more contacts which then initiated a ‘snowballing47 process.

Before each interview began, once an exchange of pleasantries had taken place (and where necessary business cards exchanged), there was a clear explanation of what the interview would entail and what sort of information was being sought including reference to ethical considerations (e.g. non-disclosure of personal information if so required) and any procedural matters relating to the interview (use of digital tape recorder and some note taking) (Robinson, 1998b). Although some interviews were conducted in English with those who could speak the language, the majority of interviews were conducted in Spanish. Having started off the interview with non-threatening questions such as asking the informant

47 Valentine (2005: 116) describes the term snowballing as “using one contact to help you recruit another contact, who in turn can put you in touch with someone else”. 

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more about their background or organisation to place them at ease (Robinson, 1998b), more open questions were then asked to encourage communication and give the interviewees an opportunity to elaborate on particular facts or indeed omit them (Skelton, 2001). During the interviews, it was found that prior preparation, by way of textual analysis not only allowed the researcher to pose the 'right questions' in an appropriate order from general to specific “so that vital views and information are not withheld” (Robinson, 1998b; 415) but it also enabled the researcher to direct the discussion and probe for more information when necessary (Robinson, 1998b; Mullings, 1999). For example, this preparation was particularly useful when interviewing people who maybe were not so forthcoming with information as others e.g. IADB representatives or government officials as it allowed for further probing when discussing the more controversial topics such as the relationship between the PPP and the MBC. Also during the interview process, caution was taken not to insert the researcher’s own opinions into questions that could otherwise sway the beliefs of the informant. This was particularly important with interviews held with members of local communities, where the power relations between the researcher and the researched may be more prominent than at the more national and regional actors (see next section on positionality). Indeed, as well as the questioning, it was also just as important to listen and respond to the participants which allowed for other information to emerge which may not have already been thought of by the researcher providing the opportunity to probe further if deemed necessary (Valentine, 2005). For example, some interviewees such as NGO representatives would readily offer information about their views on the MBC and that in many cases, they did not see it as a successful “vehicle for conservation”. These points were particularly valuable and only emerged by allowing the interviewee to respond and express their views to full effect.

Although, it was also made clear to the interviewees that they did not have to answer every question that was asked (Howard, 1999), during two interviews, the digital tape recorder was requested to be turned off and the informant requested to remain anonymous when giving information. In these cases, the information that was given was noted down as soon as the interview had finished and the
anonymous identities of these informants were respected. In the rest of the interviews, the tape recorder rarely inhibited people, and usually after the first few ‘ice breaker’ questions, and the interviews had begun to flow the informant seemed to forget that there was a tape recorder there. Other problems rarely arose during interviews due to the researcher being well prepared beforehand. In some cases interviews flowed better than others, with some informants more willing to provide information or in some cases actually knowing more. Once the appointment was over, the digital recording of the interview was transferred to a computer and burnt to a disk for transcription. The researcher transcribed all the interviews held in English, however help was sought from a Costa Rican contact48 for the transcription of the Spanish interviews who was able to pick out the local idiomatic intricacies of the interviews. A follow up email was sent shortly after the interview to the informants thanking them for their time and participation. The next sections explores how, when using a technique such as semi-structured interviews, the researcher can impact on the research process itself.

4.4. Positionality

As research is a process in which the researcher is an integral part, it is important to be aware of one’s positionality. Positionality can be described as the personal characteristics of the researcher such as race, gender, nationality, language, socio-economic positioning and political stance etc and how these have an impact on the research itself (Howard, 1997; Robson, 1997). As a result, researchers cannot be considered “neutral scientific observers, untouched by the emotional and political contacts of places” but rather each individual researcher brings together a blend of their own different experiences which “play different roles at different times” (Skelton, 2001; 89). In this way as “the validity of ones research is seen to be a reflection of ones positionality” (Herod; 1999; 314), it is therefore important that researchers are aware of how their individual characteristics shape the research process. However, not only does positionality influence the way research is conducted and how the data collection is influenced but one’s positionality also

48 Lauren Morun - Local translator from San Jose, Costa Rica.
has an impact on how the people being interviewed, perceive the researchers themselves (Howard, 1997; Skelton, 2001).

Within the interview context, these personal characteristics (in the author’s case being a white British woman49) can sometimes place the interviewer in a position of power given the role as the person asking the questions, particularly when the researcher is from the ‘first world’ and the interviewee is from the ‘third world’ (Howard, 1997; Mullings, 1999). Howard (1997; 21) noted that “the unequal power relationship between researcher and the researched can have negative consequences for fieldwork... [with] a tendency for respondents to tell the researchers what they believe she or he wants to hear”. This may be true in some cases, especially in the more rural and poorer areas, where the ‘power gap’ between ‘first’ and ‘third’ world is more accentuated e.g. with local communities around protected areas in both Costa Rica and Nicaragua. Indeed, in these circumstances, inequalities between the researched and the researcher can be more heavily felt. In Daphne Patai’s paper Is Ethical Research Possible? (1991; 141) she describes how researchers use other people throughout the research process. During a particular interview with a poor Brazilian woman she was made aware of “the unease of being a well-fed woman briefly crossing paths with an ill-fed and generous poor woman” whose life she was doing nothing to improve. The experiences that the author had were not to this extreme, although, in some cases, members of the communities that were interviewed around protected areas, saw the author as a potential rescuer from their current problems hoping that the information they were giving would encourage governments to support them more. In these situations, where little could be done to convince them that I, unfortunately, was not going to be able to change government policies etc, I listened to what the respondents had to say and once the interview had come to a close I thanked the interviewee for their information and their participation towards the research. In many ways it was these interviews that had the most

49 Many times however I was mistaken as a ‘gringa’ or a woman from the United States. Although this was never a problem, once I had corrected the interviewee and informed them that I was actually British, this not only seemed to relieve them somewhat but it also intrigued them more too. With the exploitative impact that the United States has had and still has on the region coupled with the high number of American tourists that flood into Central America each year, the US citizens seemed to have created a bad name for themselves. With the region having very little contact with Britain, the fact that I was a British citizen was potentially seen as somewhat exotic: a reason more so for them to accept an interview with me.
profound impact on me as a researcher as I felt that I was experiencing first hand how those who devise regional initiatives such as the MBC pay little attention to rural livelihoods. With cross-cultural research potentially being full of complexities, sensitivities and dilemmas, like those discussed above, it has been pondered by some as to whether or not this research should be carried out at all. However, if one is aware of one’s own positionality and the potential impacts that this may have on the respondents as well as the research process as a whole, it can be argued that effective and sensitive cross-cultural research can be conducted (Skelton, 2001).

Interestingly, however, it was found that the author’s positionality as a white British woman in the more formal environments such as in offices in the capital cities evoked a different influence on the research process such as enabling greater access to the interviewees themselves who in many cases seem to be intrigued in the research and wanted to learn more e.g. NGO representatives keen to engage in the research process. Indeed the author’s positionality also may have affected what type of information was given during some interviews e.g. IFI or government representatives who felt that they had to be careful with the information they were giving in fear that the author was a journalist who would write a negative review about their organisation etc. However, in the majority of cases, the author’s social characteristics were generally perceived as ‘non-threatening’, which encouraged the respondents to be more willing to share their thoughts, reflections and experiences and indeed impress me with their knowledge. However, whereas quite possibly my race and nationality seemed to have more of an impact on the direction of the interviews held in rural areas, in the more formal office settings where the majority of the interviewees were male, the impact of gender may have been more significant in the shaping of this particular interview process and the types of information obtained (McDowell, 1992; Herod, 1993; Howard, 1997; Robson, 1997; Skelton, 2001). In this way Howard (1997; 27) noted that “men may be less guarded when talking to you about political issues than they might be with a male researcher” and Robson (1997; 55) also noted that “where woman are culturally seen as unthreatening they may be able to obtain access and information more easily than a man”. Although
there may be increased accessibility to information between a female researcher and a male respondent, Herod (1993; 307) points out that “the information provided by male sources will undoubtedly be refractive of their own gender (and class, racial and ethnic) subject positions and experiences”. For example many of the interviews held at the regional and national scale were held with men, especially representatives from IFIs and government agencies\textsuperscript{50} whose outlook on the issues researched may well have differed from those of a woman’s. What must also be remembered here is that gender relations do not, however, disappear when the interviewee and interviewer are the same sex, rather they may bring about a slightly different personal interaction (Herod, 1993). Whilst gender therefore can have a marked influence on the interview process it also has an impact on the interpretation process of the material collected. In this way it is important to recognise how we, as researchers, through inwardly reflecting on our positionality, fit into the research process as a whole from where we can begin to address and challenge our own assumptions.

Indeed not only has this research challenged assumptions, as a researcher it has also challenged me as a person and has had a great impact on how I now see the world, especially from the north/south perspective. Having had a deep interest from a very young age in the way that we as humans relate to our natural environment, this privileged opportunity to conduct research in Central America has helped me understand and unravel the ‘hows’ and ‘whys’ behind environmental change. Although what I have discovered through my research has in some cases saddened me in the face of the ongoing and extensive environmental destruction, it has nonetheless continued to fuel my desire to bring about some sort of change as small as that may be e.g. the participation in grassroots projects orientated around sustainable living etc. Indeed this trajectory, as the concluding chapter of this thesis discusses (see section 8.4), has had an impact on how the author thinks sustainability can be achieved.

\textsuperscript{50} This is an interesting observation as these positions of ‘political power’ seem to be dominated by men rather than women, which can be a reflection of the society as a whole.
4.5 Data Analysis

Once all the interviews had been transcribed, numbered, named and dated the interpretation and analysis process began. This was helped by way of using a technique called open coding; a systematic method that allows the researcher to get as close to the material as possible by building up interpretations through a series of stages (Crang, 2005; Jackson, 2001). Open coding refers to a preliminary stage of analysis which involves meticulously sifting through interview transcripts a line or sentence at a time whilst thinking about what each sentence means and what each interviewee is trying to say. During this process a series of codes that label particular words and/or phrases for subsequent analysis are jotted down (Crang, 2005; Seale and Kelly, 1998). According to Jackson (2001; 201), “most systems of coding involve highlighting individual words or phrases or annotating sections of the transcript with interpretative codes”. Having read the transcripts several times, therefore, with key words and sentences being underlined and ideas about topics in the material written alongside, it was possible to identify specific and relevant themes from the interview text (see table 4.2). This type of thorough analysis of the transcripts ensured the avoidance of foregone conclusions as well as the charge that “qualitative researchers simply elect a few unrepresentative quotes to support their initial prejudices” (Jackson, 2001; 202).
Table 4.2 - Themes that evolved from the interview text

Regional and National Scales

1. General mission statements and background information of organisation or institution.
2. Mechanics and change of the MBC over time.
3. Government involvement and institutionality of the MBC.
4. Perceived impacts of the PPP and relationship with the MBC.
5. Perceived impacts of DR-CAFTA on the MBC.
6. MBC's relationship with the private sector.
7. NGO participation and/or involvement with the MBC.
8. Local community participation with the MBC and local level issues.
9. Costa Rican experience of the MBC.
10. Nicaragua experience of the MBC.
11. Alternatives and possible solutions to current development patterns.
12. Miscellaneous.

Local Scale

1. History of area/informant & changes seen.
2. Impacts of park and conservation in area.
3. Impacts of tourism.
4. Has interviewee ever heard of the MBC? Have they seen any impacts?
5. Views of government and environmental ministry.
6. Has interviewee ever heard of the PPP? Have they seen any impacts?
7. Has interviewee ever heard of CAFTA? Have they seen any impacts?
8. Private sector involvement in area.
9. NGO participation.
10. Local community participation in MBC and local level issues.
11. Alternatives and possible solutions to current development patterns.
12. Miscellaneous.

The interviews held at the regional and national level were analysed first as the themes that emerged from these transcripts differed to the themes that emerged from the interviews held at the local level. Once the themes started to become more defined, the transcripts were read through again and any sentence or paragraph that related specifically to a particular theme was underlined with a certain colour. Indeed, what this “categorisation helps to do is to organise the materials so that interesting relationships can be seen” (Crang, 2005; 224) which further enables all themes and implications of the materials to be drawn out. From here, it was found to be extremely useful to put these themes into a table format in separate columns and then place key information and quotes in these columns.
depending on what theme they belonged to. This process was carried out with all interviews as a way of conceptually organising the material. Once the themes had been generated it was then possible to decide how the thesis was going to take shape and how the information should be organised in and among the chapters.
5. The Mesoamerican Biological Corridor

“Only when the last tree has been cut down, only when the last river has been poisoned, only when the last fish has been caught, only then will you find that money cannot be eaten”.

~ Cree Indian Prophecy

5.1 Introduction

As we saw at the end of Chapter 3, the promotion and implementation of the Mesoamerican Biological Corridor (MBC) is one of the CCAD’s chief tasks in Central America (CCAD, 2002b). In order to try and abate some of the environmental problems caused by the prevailing neoliberal model (see section 3.3. in chapter 3), social inequality and population pressure, the MBC was put forward by the region’s governments in 1997 as a strategic program, which proposes to conserve the cultural and environmental heritage of Mesoamerica whilst fostering sustainable development (Miller et al., 2001; OdD-UCR, 2002). In physical terms, the MBC is an international land strip covering 768,990 square kilometres within Central America of which 48.7% is made up of legally protected areas, 3.9% are areas proposed for protection and 47.4% are corridor zones (Corrales & Zuniga, 2001). Extending from Selva Maya in southeastern Mexico to Darien in eastern Panama and finishing in the Choco region of Panama and Colombia, approximately 80-90 % of the region’s total biodiversity can be found within the MBC (Rivera et al., 2002; Metrick, 2003) (see figure 5.1). According to the CCAD (2004; 2), the regional governing body behind the MBC, when it has been organised and consolidated it is hoped that the corridor

“will provide a broad range of environmental goods and services to both Mesoamerican societies and the world, making a special contribution to improving the quality of life for the inhabitants of the region”.

The aim of this corridor initiative is to connect numerous individual patches of rain and cloud forests, coastal mangroves and mountain ranges within the participating countries and passing through a range of land use zones.
Figure 5.1 – The Geographic Positioning of the Mesoamerican Biological Corridor

Source: adapted from CCAD (2002b)
The 'corridor' areas will link the protected areas to create a network within which natural biodiversity and ecological processes are conserved as much as possible (Earthtrends, 2003; CCAD, 2004). The CCAD (2002c; 17), describe a biological corridor as

"a geographic space that provides connectivity between landscapes, ecosystems and habitats, natural or modified, and ensures the maintenance of biological diversity, ecological and evolutionary processes."

The core idea of biological corridors is that natural populations, communities and ecological processes are more likely to be maintained in landscapes that comprise an interconnected system of habitats by allowing the movement of species between one protected area and another or between other fragmented ecosystems or habitat (World Rainforest Movement, 2001; Garcia, 1996; Simberloff et al., 1992). Therefore, in order to conserve watersheds and coastal zones, restore degraded landscapes and protect a series of priority areas, the CCAD intend that with the establishment of the MBC, connectivity between isolated patches of ecosystems (e.g. protected areas which provide the cornerstones of the MBC) will be improved which, by enhancing the genetic vitality of isolated populations, will contribute towards the conservation of biodiversity (CCAD and World Bank, ND; CCAD, 2002c). In this way the MBC could potentially be one of the first successful biological preservation projects to stretch across several nations and borders (Cloud Forest Alive, 2003). It is considered to be unique in that not only is it one of the largest conservation efforts currently underway in the world (Mountain Forum, 2002), but it is also one of the most complex and ambitious conservation and sustainable development strategies in the world to date (Metrick, 2003; Miller et al., 2000; CCAD, 2003a). The first part of this chapter explores the roots of the initiative in more detail, outlines its current objectives, its institutional structure, expected outcomes and what has been achieved thus far. The second part of the chapter investigates how and why the initiative has changed over time and with what impacts, and how the evolution of the competing perspectives on sustainable development has served to influence the initiative.
5.1.2 The Genesis of the MBC

The development of the MBC initiative was facilitated by the ending of civil conflicts following the negotiation of cease-fires and the inception of peace processes in Central America in the early 1990s. As the peace processes moved forward, the reversal of environmental degradation and conservation of biodiversity became an important part of national and regional policy agendas as described in chapter 3 (section 3.4) (Miller et al., 2001; Illueca, 1997). Officially created in 1997, the MBC has been designed as a land use system to promote a new equilibrium between the conservation of biodiversity and sustainable economic development, through the intelligent use of biodiversity and other natural resources (Radulovich, 2000). The corridor project, originally evolved from the *Paseo Pantera* (Panther’s Path); an ambitious regional wildlands conservation proposal that was initiated in the late 1980s to address Central America’s biodiversity loss and fragmentation of habitats by uniting protected areas throughout Central America (Illueca, 1997). The *Paseo Pantera* was a five-year project (1990 – 1995), which was implemented by a consortium composed of the Wildlife Conservation Society\(^5\) and the Caribbean Conservation Corporation\(^6\) in collaboration with several educational institutions and research organizations in the United States and Central American governmental and nongovernmental organizations (Lambert and Carr, 1998). The *Paseo Pantera* gave emphasis to the establishment of a corridor or an unbroken strand of protected forest lands running along the less disturbed Caribbean side of the isthmus from the Darien of Panama to the tri-national forest, Selva Maya, of Mexico, Guatemala and Belize which would guarantee the range that wild animals need in order to survive. Its Spanish name was derived from the fact that for millions of years the Central American land bridge provided a pathway for the interchange of wildlife species, and genetic information, between the Northern and Southern hemispheres and resulted in increased diversity in both. The panther, also known as the puma or mountain lion, is found from the Andes to the Rocky Mountains and was seen as an appropriate symbol for an effort to maintain this historic linkage as well as to raise

\(^5\) The Wildlife Conservation Society (WCS) is a US based NGO that manages national and international conservation projects, research and education programs (WCS, 2006).

\(^6\) The Caribbean Conservation Corporation (CCC) is a non-profit organization that was founded in 1959 by Dr. Archie Carr and others that aims to protect sea turtles and the habitats upon which they depend. To achieve its mission, CCC uses research, habitat protection, public education and community outreach (CCC, 2006).
awareness among, and preferably money from, people for the conservation efforts (Lambert and Carr, 1998). The regional approach that characterizes the Paseo Pantera project is summarized by the Wildlife Conservation Society's Dr. Archie F. Carr III:

*By thinking in terms that reach beyond the cramped political boundaries of modern-day Central America, we may intelligently address the challenge of biodiversity conservation in the entire region. Paseo Pantera originates from a phenomenon of nature, but its successful completion will breach a human phenomenon in the region, the partitioning of the isthmus into seven small nations, whose isolation and independence from one another is considered by economists and historians to be a major factor contributing to the chronic underdevelopment of the region. Whatever else divides the human inhabitants of the Western Hemisphere, the Paseo Pantera silently unites us.*


The Paseo Pantera's main objective was to conserve biodiversity by expanding and strengthening the system of conservation areas (SICAP, see chapter 3 section 3.4) and by identifying possible routes for corridors along the Pacific slope of the region. To promote this, some of the consortium's activities included field research on techniques of buffer zone management research, the promotion of ecotourism as a strategy for sustaining conservation programs, the development of ideas for a Central American coral corridor as well as the development of environmental education programs and the coordination of international seminars (Barborak, 2001; Parent, 1995). Not only did the project try to address species conservation in the narrow Central American isthmus but it also promoted the notion of increased cooperation among states to achieve the conservation goals to which each nation ostensibly aspired (WCS, ND). The project was funded in part by the Regional Environmental and Natural Resources Management Project (RENARM), initiated by the USAID53 Regional Office for Central American Programs (Lambert and Carr, 1998).

As section 5.2 goes on to analyse, the strict conservation approach towards protecting natural resources that was adopted by the organisations behind the Paseo Pantera,

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53 USAID (United States Agency for International Development) is a US government agency that aims to assist developing countries in their development efforts (through loans and technical support) whilst advancing the economic and political interests of the US.
caused concern not only amongst local residents, such as indigenous communities who feared expropriation of their ancestral lands and the expansion of protected areas onto their territory (Miller et al., 2000; 5), but also amongst governments who were keen to combine natural resource protection with more of a socio-economic emphasis. With the Paseo Pantera project ending in 1995, competing perspectives towards sustainability, especially within the region’s governments, started to influence how the region should be managing its natural resources. In 1995, in San Jose, Costa Rica, during the conference of *Biodiversity in Mesoamerica: Diagnosis of the factors that affect its conservation and creation of a regional strategy for its conservation and restoration*, the Central American Commission on the Environment and Development (CCAD) and GTZ54 proposed the idea of the Mesoamerican Biological Corridor as a more comprehensive regional project to address both conservation and development needs, taking into account social, cultural and economic factors (Vargas & Sandoval, 2002; Garcia, 1996). It was at this time that the region’s governments took control over the project, expanding the idea of the Paseo Pantera, formally launching and utilizing the concept as an opportunity to reconcile the need for peace, environmental protection, and economic development (Metrick, 2003). This shift in governance from conservation orientated NGOs to the region’s governments was to have a profound impact on the changing nature of the MBC project and what it constitutes today. In 1996, the CCAD with funding from the Global Environmental Facility55 (GEF) developed a preparatory phase of identification56 of the project which supported the establishment of the corridor (CCAD, 1996). The objective was to plan the extension and modification of existing protected areas (UNDP-GEF, 1999). Then in 1997, the agreement for the establishment of the MBC was formally launched by the presidents of the seven Central American nations and the project was officially adopted at the Central American Presidential Summit Meeting in Panama City as an environmental initiative with “a central development concept; integrating conservation, sustainable use, and biodiversity within the framework of sustainable

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54 GTZ is the technical arm of the German Development Agency which, geared around sustainable development, provides support and assistance to developing countries.

55 The Global Environment Facility (GEF), established in 1991, helps developing countries fund projects and programs that protect the global environment.

56 This phase of identification encompassed an in depth study into the current state of the region’s protected areas, biological corridors and buffer zones at that time (1996) and how their conservation could be improved through decentralisation.
economic development” (Sader et al., 2001; 1). The definition of the MBC that was adopted by the presidents of the region when the initiative was ratified in 1997 was:

“A territorially organised system composed of natural areas under special administration regimes, buffer zones of multiple use, and interconnecting areas, all of which are organised and consolidated to provide a range of environmental goods and services for the benefit of Central America and the world, creating necessary social spaces to ensure the promotion of sustainable use of natural resources, with the objectives of contributing to the improved quality of life for the inhabitants of the region”

(CCAD, 2002b; 41)

Although the MBC started to expand conceptually away from its conservation-oriented roots as the Paseo Pantera, the initiative still continued to build on the consolidation of the SICAP,

“defining the corridor’s associated buffer zones and areas of multiple use and interconnections as areas for conservation and sustainable use of natural resources and productive landscape restoration” (World Bank, 1998; 3).

More generally though, the MBC was promoted as a regional unifying umbrella program that would not only address the lack of uniform management policies for national systems of protected areas through the consolidation of SICAP but also attempt to standardise environmental legislation in Mesoamerica (Pedroni & Jimenez, 2002; UNDP-GEF, 1999; Godoy, 2003). At the same time, it was hoped that the MBC would prove to be a suitable strategy for the Central American region to achieve the commitments signed in international conventions for biodiversity, climate change etc (see chapter 2). Indeed, through the management of protected areas, their buffer zones and connections, the presidents also agreed to recognise the MBC as a point of reference and a tool to prioritise and stimulate other initiatives and projects for the purposes of economic development (World Bank, 1998). In this way, whilst the MBC still demonstrated a commitment to natural resource protection through building on the objectives of the Paseo Pantera, as the ensuing sections of this chapter will make clear it is clear that the initiative has incorporated more of a socio-economic focus into its agenda.
5.1.3 Objectives of the MBC

The regional planning and implementation of the MBC is directed by the Ministers of the Environment of each Central American country, as part of the CCAD (section 3.4), the initiative’s main governing body (Miller et al., 2001). Table 5.1 below describes the mission of the MBC. These objectives and the action axis of how some of these objectives will be achieved (Table 5.2) demonstrate that the ideas that are informing the MBC do not consider biodiversity management in isolation. Indeed, through being based on the idea that human beings have the right to use biodiversity resources in a sustainable manner to achieve an adequate quality of life, the initiative seeks its integration into processes of social and economic development at both the municipal and state levels promoting an interventionary interpretation of sustainable development (Rivera et al., 2002).

Table 5.1 - The MBC’s Mission

1. Betterment of the living quality of the inhabitants, changing the Corridor into the driving force towards sustainable development and into an instrument to reduce the vulnerability of the region against natural disasters.

2. Fomenting the collaboration between the countries of the region to achieve environmental sustainability.

3. Protection of an area with some of the richest natural resources in the world.

4. Contribution to the global environmental agenda, issuing a new complete model to face issues such as deforestation, protection of the forest, basins or watersheds and climate change.

5. Establishment of a new way to understand the protection of environmental issues, with the integration of conservation, increasing economic competitiveness.

Source: Barzev57 (2001)

57 Advisor on Environmental Economics for the regional project for the PCCBM.
Table 5.2 - The MBC Action Axis

1. Poverty Relief
Promotion of socio-economic activities that will benefit the environment and offer new employment opportunities.

2. Disaster Mitigation
The integrated management of natural resources in the connection zones will be achieved by maintaining healthy ecosystems helping disaster mitigation.

3. Environmental Services
Efforts will be increased to value strategic environmental goods and services in the region such as water and soil erosion prevention, and to promote eco-friendly and profitable practices and experiences such as organic agriculture, certified forest management and eco-tourism.

4. Cultural patrimony and traditional knowledge protection
The preservation of sacred practices of indigenous groups and utilisation of their knowledge and insights for the better management of the areas' natural resources.

5. Strengthening institutional capacities
Provision of technical support for regional governmental and non-governmental institutions in order to guide decision making and policy definition for natural resource management, using tools such as GIS or biodiversity tracking techniques.

6. Strengthening the Central American integration process
By sharing efforts and jointly planning the use of natural resources, the countries within the MBC will strengthen the Central American integration process, opening better opportunities for socio-economic development.

7. Priority areas
In national trans-border regions, the exchange of experiences and coordination promotes the joint management of natural resources. The work accomplished in the protected areas will thus strengthen the social fabric and contribute to peace and regional stability in the long term.

Source: Zuniga & Cardenal (2001)

However, the MBC is not only a conceptual initiative, but, as described in the introduction, it also clearly takes the form of a physical initiative. From this physical perspective, therefore, the MBC is intended to establish a land use scheme within its corridor system consisting of four categories (core zones, buffer zones, corridor zones and multiple-use zones) with each category addressing a different need (these are explained in detail in table 5.3) (Chang, 2002). According to Miller et al. (2000; 10) "the relative extent of each of these zones will vary depending on the social, economic, biological, and institutional context within which they are situated" e.g. core zones and corridors can be established where extensive wildlands still remain and where human population is low.
Table 5.3 - Categories of land use within the MBC

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Zones</td>
<td>The protected areas within the corridor, where wild habitats and biodiversity are maintained.</td>
</tr>
<tr>
<td>Buffer Zones</td>
<td>Areas surrounding the core zones, functioning to mitigate disturbances.</td>
</tr>
<tr>
<td>Corridor Zones</td>
<td>Areas that link the core zones with land or water pathways, allowing plants and animals to disperse and migrate.</td>
</tr>
<tr>
<td>Multiple Use Zones</td>
<td>Areas that promote a diverse, mosaic like landscape that feature mixed crops and land uses that are biodiversity friendly while offering livelhoods to residents.</td>
</tr>
</tbody>
</table>

Sources: Chang (2002); Miller et al. (2001)

From the institutional perspective, the CCAD can be considered to be the MBC regional management team. However, the project incorporates a great variety of stakeholders, from the many different types of organization that run and fund their own projects under the banner of the MBC, to the communities of people who live within the physical corridor, which makes it difficult to identify a particular owner. In addition, different stakeholders have very different attitudes towards the initiative. For example according to the Presidents declaration of 1997, the MBC is a territorial organising tool; for many environmental NGOs and conservationists, the MBC is a biodiversity conservation tool; government officials consider the corridor as a way to strengthen the national systems of protected areas; and for local communities, it might be interpreted as a way to limit their access to land and natural resources (Rivera et al., 2002). As Brechin et al. (2002; 44) point out, conservation programmes such as the MBC “tie up natural areas that are highly sought after by resource-dependent agrarian communities” as well as a number of other groups at regional, national and local levels that also have interests at stake in these areas. Table 5.4 summarises some of the desirable outcomes the main stakeholder groups are likely to seek from the MBC initiative (Miller et al., 2001).
Table 5.4 - Examples of desirable MBC outcomes for main stakeholder groups

<table>
<thead>
<tr>
<th>Governments</th>
<th>Conservationists</th>
<th>Local Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emergence of domestic and international markets for environmental goods and services</td>
<td>• Better representation of endangered ecosystems in protected areas</td>
<td>• Greater participation in decision making</td>
</tr>
<tr>
<td>• New tax and policy incentives for sustainable land-use practices</td>
<td>• Restoration of natural habitat corridors</td>
<td>• Recognition of legitimisation of indigenous land rights</td>
</tr>
<tr>
<td>• Development of transportation infrastructure land-use practices</td>
<td>• Creation of biodiversity-friendly landscapes surrounding core natural areas and corridors</td>
<td>• Recognition of traditional environmental knowledge and a variety of alternative, sustainable resource management practices</td>
</tr>
<tr>
<td>• Increased regional economic integration</td>
<td>• Stabilisation and recovery of endangered species populations</td>
<td>• Protection of cultural traditions and scared sites</td>
</tr>
<tr>
<td>• Improved education levels and reduced migration of urban centres</td>
<td>• Expansion of ecosystem services, reduction of human threats to biodiversity</td>
<td>• Improved water supplies and public health</td>
</tr>
<tr>
<td>• Fair payment or recognition for environmental goods and services provided</td>
<td></td>
<td>• Reduced vulnerability to floods and other disasters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increased employment and income for residents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Improved access to credit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increased access to international markets for sustainably produced goods and services</td>
</tr>
</tbody>
</table>

Source: Miller et al. (2001)

With so many potential contradictions existing amongst the different stakeholders’ objectives, Brechin et al. (2002; 44) argue that in order for conservation interventions such as the MBC to successfully handle this degree of complexity “the process by which nature protection is carried out must be ecologically sound, socially and politically feasible and morally just”. As such, one of the key challenges of the MBC initiative (Table 5.5) according to Miller et al. (2001; 13) is to reconcile the interests of the various groups involved. At a national level, the main obstacle to transboundary cooperation is getting people and institutions accustomed to different management
systems, outlooks and enforcement procedures to collaborate successfully (Bilderbeek, 1992).

<table>
<thead>
<tr>
<th>Table 5.5 - Key challenges for the MBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reconciling stakeholder interests;</td>
</tr>
<tr>
<td>• Fostering democratic governance and enabling civil society participation;</td>
</tr>
<tr>
<td>• Catalysing information for participatory decision making clarifying the function of MBC land use categories;</td>
</tr>
<tr>
<td>• Addressing property rights and land tenure issues;</td>
</tr>
<tr>
<td>• Capturing benefits from ecosystem goods and services;</td>
</tr>
<tr>
<td>• Harmonising institutional and legal frameworks and promoting intersectoral coordination;</td>
</tr>
<tr>
<td>• Setting investment and management priorities.</td>
</tr>
</tbody>
</table>

Source: Miller et al. (2001)

The fate of the corridor essentially depends on the willingness of governments, civil society, and the private sector to be more participatory and accountable (Chang, 2002). Whether and how these stakeholder groups bridge their differences will determine the approaches, policies and management practices that build the MBC and ultimately the initiative’s overall success or failure.

5.1.4 Funding of the MBC

In order to achieve the objectives outlined above, the MBC has been facilitated through many national and regional scale projects that have been funded and implemented by a series of different stakeholders such as multilateral donors, the World Bank, UNDP58, national governments and NGOs. Consequently, the MBC has served as a major focal point for donor assistance (see table 5.6). However as the MBC agenda has shifted over time, resulting in a less defined (this idea will be discussed in more detail in section 5.2) and indeed a more diluted initiative, “it is difficult to know exactly the amount of money that is going into separate projects linked to the MBC concept” (Graham, 200559). So, whilst it is clear that the corridor

58 The United Nations Development Programme (UNDP) is a body of the United Nations set up in 1965 to promote human development in developing countries through poverty alleviation, environmental regeneration, employment creation, and advancement of the status of women.
has attracted significant inflows of international finance, the fact that it has largely been financed through individual discrete national and regional projects makes it difficult to calculate the exact total expenditure on the whole corridor venture so far. However, up to the year 2000, an estimate given by the World Bank (2001a; 3) for the total financing for projects directly related to the MBC by all sources exceeds US $1.249 billion. Projects financed by the IADB and the World Bank which are directly related to the corridor concept (conservation and management of forest resources, biodiversity, watershed management, land administration and ecotourism) surpassed US $888 million in 2000, and those which are indirectly associated (agricultural, transportation, sanitation, social investment, infrastructure and energy sectors) totalled more than US $4.54 billion (World Bank, 2001a). In December 2002, the CCAD presented the MBC Business Plan to the international community at the Paris Donor Conference held at the World Bank office, in order to gain renewed financial support from bilateral and multilateral institutions for the period 2003 – 2007 for project implementation. Before the Paris Conference, various donor countries, mainly from Europe, Japan and the US had already committed more than US $400 million to national projects in seven Central American countries and Mexico for the five-year period of 2003 – 2007, in areas such as conservation of biodiversity, land administration and sustainable management of resources. However, in 2002, donors at the Paris Conference, in accordance with the Business Plan, pledged an additional US $70 million to support regional integrated activities in the framework of the MBC (World Bank, 2002). This Business Plan framework includes 1) harmonization of policies (US $2,875,960); 2) Sustainable production (US $2,733,000); 3) Communications (US $15,646,200); 4) Management of Natural Resources (US $38,768,000); 5) Strategic Information (US $9,201,300); and 6) Valuation of natural Resources and Economic Instruments (US $956,200) (CCAD, 2002d).

In addition to the funding support received from donors after the Paris conference, the CCAD, through an agreement with NASA (National Aeronautic Space Administration), secured services worth US $12 million through 2003 to develop land use maps for Central America and improve the data for inclusion in Geographic Information Systems. Also through 2003, the Inter-American Development Bank
(IADB) financed a project to control pollution from maritime transport in the Gulf of Honduras (US $7 million) and the Danish Development Agency (DANIDA) provided financial support for a project to conserve the coastal marine systems of the Gulf of Fonseca (US $2.6 million) (USAID, 2002). The IADB, the main investment body behind the PPP, is also funding a sub project of the Sustainable Development Initiative, the Indigenous Consultation and Project Design (ICP) which aims to encourage participation with indigenous communities that live within the MBC and the PPP area (see chapter 6 section 6.6.1) (IADB, 2003a). Other financial assistance has come from the Nature Conservancy, WWF, and the US based University of Rhode Island, who since 2002 and with funding from the USAID, have focused on conservation and management of the Mesoamerican Barrier Reef system. This particular project, initiated by the governments of Mexico, Belize, Guatemala and Honduras in 2001, aims to protect the second longest barrier reef in the world. Its principal objectives are to strengthen and coordinate the national policies and institutional agreements amongst the four countries to conserve marine ecosystems and promote their sustainable use (Cordero & Castro, 2002; MBRS, 2004). At the national level, the national MBC office in Costa Rica has initiated the coordination of efforts by NGOs to establish biological corridors that will connect indigenous reserves, protected areas, wetlands and coastal zones (Chang, 2002).
Table 5.6 - Summary of Funding of the MBC up to 2006

<table>
<thead>
<tr>
<th>Donor</th>
<th>Amount US$</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>The World Bank &amp; IADB</td>
<td>888 million</td>
<td>Conservation and management of forest resources, biodiversity, watershed management, land administration and ecotourism.</td>
</tr>
<tr>
<td></td>
<td>4.54 billion</td>
<td>Agricultural, transportation, sanitation, social investment, infrastructure and energy sectors.</td>
</tr>
<tr>
<td>Donor Countries (Europe, US, Japan etc)</td>
<td>400 million</td>
<td>Conservation of biodiversity, land administration, sustainable management of resources (pre 2002).</td>
</tr>
<tr>
<td></td>
<td>70 million</td>
<td>Support and consolidation of the MBC Business Plan (post 2002).</td>
</tr>
<tr>
<td>CCAD and NASA</td>
<td>12 million</td>
<td>To develop land use maps for Central America and improve the data for inclusion in Geographic Information Systems.</td>
</tr>
<tr>
<td>IADB</td>
<td>7 million</td>
<td>To control pollution from maritime transport in the Gulf of Honduras.</td>
</tr>
<tr>
<td></td>
<td>1 million</td>
<td>The implementation of the Indigenous Consultation and Project Design (ICP) as part of the PPP.</td>
</tr>
<tr>
<td>DANIDA</td>
<td>2.6 million</td>
<td>To conserve the coastal marine systems of the Gulf of Fonseca.</td>
</tr>
<tr>
<td>GEF - UNDP</td>
<td>6 million</td>
<td>PCCBM (see section 5.1.5 below)</td>
</tr>
<tr>
<td>GTZ</td>
<td>10.6 million</td>
<td>PCCBM</td>
</tr>
<tr>
<td>Central American governments</td>
<td>4 million</td>
<td>PCCBM</td>
</tr>
</tbody>
</table>

Sources: World Bank (2001a); World Bank (2002); CCAD (2002d); USAID (2002); IADB (2003a); CCAD (2004).

5.1.5 Towards the Consolidation of the MBC

With the establishment of the Central American Alliance for Sustainable Development (ALIDES) in 1994, the CCAD has been engaged in an ongoing effort to formulate and position the concept of the MBC, developing a legal and institutional framework to promote the coordination of policies and actions and implement
concrete projects (CCAD, 2002a). As discussed in section 3.4, one of ALIDES’ main goals is to ensure that the governments of each of the Central American countries take measures towards the protection of the environment, which include the consolidation of SICAP (Central American Protected Area System) and the establishment of a comprehensive system of biological corridors. In this way, ALIDES, perceives the need to create and consolidate a regional biological corridor in order “to strengthen the respective national systems of protected areas” (UNDP-GEF, 1999; 18). In order to help promote the organisation and consolidation of the MBC initiative, a six-year project called the Establishment of a Program for the Consolidation of the MBC (PCCBM) was launched in 2000 that aimed to integrate and strengthen all local, national and regional efforts to build the MBC by establishing the institutional framework for the management of the corridor, a priority of ALIDES (UNDP-GEF, 1999). The main goal of the PCCBM is to provide technical assistance enabling governments and societies of Mesoamerica to jointly set up the MBC as a system that integrates, conserves and makes use of biodiversity in the framework of economic, social and sustainable development (Radulovich, 2000). Included in the PCCBM plan was the concept that the MBC forms an umbrella organisation that incorporates smaller programs including the Mesoamerican Barrier Reef System, MBC Panama Atlantic and other regional ‘corridor’ projects (UNDP-GEF, 1999, Miller et al., 2001).

There are three international implementing agencies behind the PCCBM project that provide support; the World Bank, which, by working bilaterally with the countries is investing in the conceptual development of the MBC. The Bank is also managing the national investment initiatives by channelling its funds through the GEF, which are then implemented by the UNDP and managed by the CCAD; the UNDP and the UNEP which implement GEF funds at the regional level and offer the infrastructure and national presence that allows the MBC to work regionally. The UNDP focus their efforts more on capacity building, whilst the UNEP assist more with the information and technology input for the initiative (see figure 5.2) (Corrales, 2005; World Bank, 2001a).

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60 Olga Corrales, Environment Programme Office UNDP - Interview held in Costa Rica on 24th January 2005.
The regional agency in Central America behind the implementation of the PCCBM is the Regional Coordination Office (ROCU) for the PCCBM, which is based in Managua, Nicaragua and the CCAD (The Central American Commission for Environment and Development) acts as the projects coordinator (CCAD, 2004).

With regard to financing, the PCCBM throughout its six years life span received non-reimbursable financial support of US $10.6 million from the GEF-UNDP, $4 million from the German Development Agency (GTZ) and $6 million from DANIDA, along with an estimated $4 million in counterpart funds from the Central American governments over the period 2000-2006 (CCAD, 2004).

The PCCBM was originally designed on the basis that it would provide a comprehensive study of inputs, tools and capacities to the CCAD and national institutions involved within the project. At the same time, it was also intended to establish a long-term regional program that would guarantee the maintenance of the different functions of biological connectivity, especially between areas, through establishing local biological corridors and territorial organisation plans. However, the complexity and scope of the project led other agencies and actors (such as NGOs, grassroots actors, the private sector) to mobilise additional resources to fund other national and regional projects which contributed towards the PCCBM. Whilst these contributions enriched the initiative, they also complicated the PCCBM’s linkages and coordination (CCAD, 2004). In order to avoid duplicating the efforts of other projects and initiatives led by other sectors or agencies, the PCCBM outlined a series of specific priorities, focusing its interventions in 5 key areas (Table 5.7). Table 5.8 shows the intended expected outcomes at the end of the 6-year life of the project.
Table 5.7- Objectives of the PCCBM

1. Harmonisation of management policies and instruments;
2. Establishment of a biodiversity information and monitoring system;
3. Development of alternative strategies for financing conservation in protected areas and biological corridors;
4. Outreach about the MBC initiative and the projects progress and achievements;
5. Development of national and regional institutional capacities.

Source: CCAD (2004)

Table 5.8- Expected outcomes of the PCCBM (2000 – 2005)

- Improved conservation status of Mesoamerican biodiversity through support to consolidation of protected areas;
- Increased knowledge and data collection about the species and ecosystems of the region;
- Increase in the level of public awareness of the value of goods and services provided by forests and protected areas;
- Contribution to the recovery of degraded ecosystems in specific areas of the regions;
- Strengthened institutions and organisations involved in administration, protection and management of SICAP;
- An official document on management policies for the Mesoamerican system on protected areas;
- A system of ecological classification for Mesoamerica, prepared, published and in use;
- Primary and secondary school syllabi modified and officially accepted on biodiversity conservation and related subjects;
- Improvement of the capacity to manage, administer and protect natural resources, of at least 300 people: resource managers in protected areas and forests, communal leaders, municipal authorities and staff conservation NGOs;
- A regional study to show the economic value of environmental services from the forests and protected areas prepared and published.

Source: UNDP-GEF (1999)

As the PCCBM has recently come to an end in late 2005, it is still too early to determine whether all the outcomes have been achieved successfully and whether the overall project has been effective. However a document prepared by the CCAD
in 2004 identified the progress of the PCCBM at that time as well as its main achievements (Table 5.9).

Table 5.9 - Achievements of the PCCBM by 2004

- Publication of CCAD document “the Mesoamerican Biological Corridor; A Platform for Sustainable Development” which identified the first operational definition of biological corridors accepted by actors;
- The development and publication of national MBC plans for Costa Rica, Panama and Mexico and the completion of Guatemala, Honduras and El Salvador;
- The completion of officially approved National Biodiversity Strategies for each country in the region;
- The development of a study to define the co-management baseline for protected areas which has contributed towards the consolidation of SICAP.

Table 5.9 - Achievements of the PCCBM by 2004 (continued)

- The contribution towards the development of both national and regional maps of the Central American region;
- The contribution towards the task of building a Mesoamerican Environmental Information system (SIAM);
- The PCCBM has helped the regional technical committees of Information and Biodiversity Systems to analyse different proposal based on already operating systems such as CONABIO (The National Commission for the Knowledge and Use of Biodiversity) in Mexico;
- The development of a study of the current status of biodiversity in Central America and its outlook for the future;
- The contribution towards establishing a theoretical methodological foundation for designing and applying environmental goods and services fee and payment mechanisms;
- Provision of support for local actors to improve their capacity to gain financing for conserving biodiversity more efficiently;
- The investment of resources in producing basic materials for promoting the MBC in different formats, languages and mediums;
- The facilitation of the inclusion of basic concepts about biodiversity, biological connectivity and the role of biological corridors within school curricula and textbooks;
- The establishment of a website which covers all aspects of the MBC (www.biomeso.net);
- The development of the MBCs general communications strategy that is intended to help the promotion of the MBC in a more harmonised way.

Source: CCAD (2004)
Alongside the PCCBM, the CCAD launched a five-year programme (2001–2006) called PROARCA (Protected Areas and Environmental Marketing Component of the Regional Development Program for Central America) to help strengthen the MBC's network of protected areas. This program has been supported financially by USAID and implemented by The Nature Conservancy\textsuperscript{61}, WWF\textsuperscript{62} and the Rainforest Alliance\textsuperscript{63}. Its objectives have been to contribute to improved environmental management in the MBC by focusing on the improvement in the management and administration of protected areas, the promotion of environmentally sound products and services in agricultural, forestry, tourism and marine production activities, the harmonisation of environmental policies and the promotion of the use of less polluting technologies in the municipal and private sectors (PROARCA, 2003; Rainforest Alliance, 2004).

With plenty of funding and support being provided for the MBC initiative as well as concerted efforts to consolidate the corridor through both the PCCBM as well as PROARCA, it would seem that the initiative has the potential of being a regional success in terms of the promotion of sustainable development. However the growth of the MBC initiative has not happened in a vacuum and the ideas of sustainability informing the agendas of the organizations involved in the project have certainly shifted over the years as have the predominant international interpretations of the whole idea of sustainable development. With this in mind, the next section explores the changing nature of the MBC over the years, the reasons behind the changes and what have been the perceived impacts so far by onlookers.

5.2 Exploring the shifting agenda of the MBC

5.2.1 Changing places, changing faces: from the Paseo Pantera to the MBC

Originating as the Paseo Pantera in the late 1980s, the shift to what is known today as the Mesoamerican Biological Corridor is an illustration of the changing nature of the

\textsuperscript{61} The Nature Conservancy (TNC) is a US-based non-profit organization working towards the protection of endangered species and ecosystems through land acquisition and research.

\textsuperscript{62} See chapter 2 for explanation of WWF.

\textsuperscript{63} Rainforest Alliance is a non-profit based organisation which aims to protect natural ecosystems as well as the people and wildlife that depend on them by transforming land-use practices, business practices and consumer behaviour.
concept of sustainable development itself. Indeed the inception of the *Paseo Pantera* appeared to be an ideal proposal to many ecocentric conservationists since its main focus was on consolidating national parks and protecting biodiversity. Even though some thought had gone into the social aspect of the corridor, the emphasis was on conserving biodiversity by expanding and strengthening the system of conservation areas and sustainably managed buffer zones which would be linked by corridors where improved land use would be promoted (Barborak, 2006). Both Pascal Girot\(^\text{64}\), an environmental risk advisor for the UNDP, Costa Rica, and the ex-secretary of the CCAD (1996 – 2000), Jorge Cabrera\(^\text{65}\) recognised the fact that the MBC's origin was "clearly biological" and that it was originally "managed by people who were more biologically orientated" however, according to both the interviewees, the "concept has indeed evolved over time".

With the region's governments taking control of the initiative in the mid 1990s, (especially after the conference on *Biodiversity in Mesoamerica* held in 1995 in San Jose, Costa Rica where the CCAD along with GTZ put forward the idea of the Mesoamerican Biological Corridor as a more comprehensive regional strategy towards sustainable development (Vargas & Sandoval, 2002; CCAD, 1996) (see section 5.1.2)), the idea of the Paseo Pantera was soon expanded from a purely environmental protection proposal to one that also aimed at promoting peace and economic development within the Central American region (Metrick, 2003). The shifting agenda of the MBC was acknowledged by both Danilo Saravia\(^\text{66}\) from the MBC coordination team in Managua who suggested that over time "the corridor has changed from concentrating on total conservation to an articulation of conservation and production" and the ex Minister of the Environment (MARENA) in Nicaragua, Jaime Incer\(^\text{67}\), who stated that the "idea has changed from absolute conservation to more social and economical issues". This changing of hands of the initiative has meant that important figures from the conservation community, such as Archie F. Carr III from the Wildlife Conservation Society, who set the ball rolling for the Paseo

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\(^{64}\) Pascal Girot, Environmental risk advisor for the UNDP – Interview held in Costa Rica on 24\(^{\text{th}}\) November 2004.

\(^{65}\) Jorge Cabrera, Ex - Secretary CCAD – Interview held in Guatemala on 22\(^{\text{nd}}\) July 2005.

\(^{66}\) Danilo Saravia, Impact Assessor MBC - Interview held in Nicaragua on 21\(^{\text{st}}\) April 2005.

\(^{67}\) Jaime Incer, Ex Minister of MARENA – Interview held in Nicaragua on 28\(^{\text{th}}\) April 2005.
Pantera, "have been bemused onlookers as nation states and international institutions have picked up the ball and run off with it" (BBC Radio 4, 2004). However, whilst the consideration and subsequent integration of both social and economic factors into the MBC initiative have been important in bringing about a more comprehensive and multidisciplinary approach, according to Barborak (2001; 7), many conservationists are now asking, "what happened to the biology in the biological corridor?" Table 5.10 below demonstrates the change in the general objectives from when the MBC was the Paseo Pantera and the MBC objectives of today.

<table>
<thead>
<tr>
<th>Table 5.10 - General Objectives for the Paseo Pantera and the MBC</th>
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<tbody>
<tr>
<td>• Consolidate Central American National park System (SICAP).</td>
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<tr>
<td>• Support pioneering regional efforts to promote eco-tourism.</td>
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<tr>
<td>• Finance courses and projects on ecological restoration and buffer zone management.</td>
</tr>
<tr>
<td>• Propose the idea of a Central American coral corridor.</td>
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<tr>
<td>• Demonstrate possible routes for corridors along the Pacific slope of the region.</td>
</tr>
<tr>
<td>• Sponsor several field research and conservation projects along Pacific slope</td>
</tr>
<tr>
<td><strong>Mesoamerican Biological Corridor (1995 – 2006)</strong></td>
</tr>
<tr>
<td>• Betterment of the living quality of the inhabitants, changing the Corridor into the driving force towards sustainable development and into an instrument to reduce the vulnerability of the region against natural disasters.</td>
</tr>
<tr>
<td>• Fomenting the collaboration between the countries of the region to achieve environmental sustainability.</td>
</tr>
<tr>
<td>• Protection of an area with some of the richest natural resources in the world.</td>
</tr>
<tr>
<td>• Contribution to the global environmental agenda, issuing a new complete model to face issues such as deforestation, protection of the forest, basins or watersheds and climate change.</td>
</tr>
<tr>
<td>• Establishment of a new way to understand the protection of environmental issues, with the integration of conservation, increasing economic competitiveness.</td>
</tr>
</tbody>
</table>

Source: Barborak (2001)  
Source: Barzev (2001)

From comparing these objectives, it is possible to see that the MBC has very much broadened the original objectives of its predecessor, taking the focus off the conservation of biodiversity and diluting it with less specific objectives such as "betterment of the living quality of the inhabitants", "contribution to the global environmental agenda" and "establishment of a new way to understand the..."
protection of environmental issues with the integration of conservation, increasing economic competitiveness". With this in mind, it can be said that the shift from Paseo Pantera to the present day MBC initiative demonstrates that conservation efforts have moved away from the rather narrow ecocentric approach of predominantly protecting nature towards more anthropocentric and multidisciplinary approaches focusing on sustainable use of natural resources (Rouquie et al., 2002) (see chapter 2). Indeed as Carlos Manuel Rodriguez, the Minister of the Environmental for Costa Rica pointed out "the MBC is now a proposal for sustainable rural development." Speaking in 2004, Ricardo Ulate68, a representative from SETENA (National Environmental Technical Secretary of Costa Rica) the branch of MINAE (Ministry of the Environment Costa Rica) that handles environmental impact studies stated that:

"the MBC has been devised as a functional and participatory system that articulates regional policies and actions with national ones for the management of protected areas for promoting sustainable production systems in such a way that the MBC contributes to the main objective of reducing poverty".

According to Lorenzo Cardenal69 the ex-director of the MBC (2001 –2005), the MBC will achieve this by:

"creating a political and technical framework to coordinate the efforts of eight countries to form a basic tool kit for the implementation and management of the corridor. We provide guidelines for the different stakeholders in each country to promote the establishment of the corridors".

When compared with the objectives of the Paseo Pantera (Table 5.10), these declarations are not only ambitious but seem more like vague statements of intent rather than achievable targets. Such vague statements of intent, as chapter 2 highlights, have also been witnessed on the international stage especially since the World Summit at Rio in 1992. Instead of being an initiative, which focuses on the conservation of the physical corridor, the MBC has become considerably more conceptual and, according to Randall Garcia70 from Inbio71, "is not something you

68 Ricardo Ulate, Environmental Impact assessor SETENA - Interview held in Costa Rica on 16th November 2004.
69 Lorenzo Cardenal, Ex General Director MBC - Interview held in Nicaragua on 5th May 2005.
70 Randall Garcia, Associate Director INBIO - Interview held in Costa Rica on 30th November 2004.
71 The National Biodiversity Institute (INBio) of Costa Rica is a private research and biodiversity management centre, established in 1989 to support efforts to gather knowledge on the country’s biological diversity and promote its sustainable use.
can measure or you can see”. Indeed, several figures and organisations behind the MBC such as Lorenzo Cardenal, a GTZ representative\(^\text{72}\) and Carlos Manuel Rodriguez\(^\text{73}\) the Minister of the Environment (MINAE) in Costa Rica have made it clear that today the MBC is a tool that would improve the political coordination of the eight countries involved in the initiative. As Sr Cardenal emphasised “we are not going into the forests to save connectivity. Our role is more institutional and more about policy making and dialogue facilitation”. It is this political institutionality which Carlos Manuel Rodriguez believes “is needed in order to create conditions for sustainability”. However, even though it is of the utmost importance to have political harmonisation amongst all of the eight countries involved in the MBC and to, as Sr Cardenal points out, “translate hard science to common language between politicians so that coherent environmental policies can be made between countries”, such harmonisation is useless unless practical action is taken on the ground.

In the light of the evolution towards less specific criteria that now define the MBC, critics cited in an article from the Nica Times\(^\text{74}\) (2006) have argued that “what was once a well intended regional conservation effort, got derailed somewhere along the way and has lost its green focus”. Indeed, other onlookers such as Diana Juskovsky\(^\text{75}\) from Rainforest Alliance as well as academics from the CATIE\(^\text{76}\) agricultural college\(^\text{77}\) in Costa Rica have also noticed how the MBC has shifted away from its more conservation orientated approach, losing its biological function and has moulded itself more into a development project which is “very vague and is more about propaganda, ideas and concepts”. Even Douglas Graham\(^\text{78}\), a biodiversity specialist from the World Bank, one of the main institutions backing the Establishment of a Program for the Consolidation of the MBC (PCCBM) (see section 5.1.5) admitted “the MBC has changed its focus over time and has become more diluted. There is no

\(^{72}\) GTZ Representative for MBC – Interview held in Nicaragua on 10\(^{th}\) June 2005.

\(^{73}\) Carlos Manuel Rodriguez. Minister of MINAE - Interview held in Costa Rica on 12\(^{th}\) November 2004.

\(^{74}\) The Nica Times is a English newspaper which covers news in Nicaragua. It is a publication of the Tico Times in Costa Rica.

\(^{75}\) Diana Juskovsky, Director Rainforest Alliance – Telephone interview held in Costa Rica on 12\(^{th}\) November 2004.

\(^{76}\) CATIE is the Tropical Agricultural Research and Higher Education Centre based in Costa Rica which is “dedicated to sustainable rural development and poverty reduction in tropical America” (CATIE, 2006).

\(^{77}\) Dr Celia Harvey and Dr Brian Finnegan, CATIE - Interviews held in Costa Rica on 28\(^{th}\) June 2005.

\(^{78}\) Douglas Graham, Biodiversity Specialist World Bank – Telephone Interview to Washington DC, 19\(^{th}\) April 2005.
official declaration as to what constitutes the MBC⁷⁹. This dilution, according to Mario Boza⁷⁹, one of the pioneers of the Paseo Pantera, has been articulated by the broadening of the MBC objectives (Table 5.10), which now cover “rural areas, water sheds, water purification, women and the environment”. With such an expanded coverage in its objectives from when it was the Paseo Pantera, Sr. Boza commented on how it is now impossible for the MBC to actually “dig into to anything very deeply” questioning how “a corridor can alleviate poverty?” Indeed, not only has the initiative itself been diluted down, but so too has the actual management of the MBC. According to Jim Barborak⁸⁰, director of the Mesoamerican and Caribbean Program for the Wildlife Conservation Society in 2001 (one of the organisations that had spearheaded the Paseo Pantera) (Pers Comm, 2006):

“by the mid 1990s, the project had evolved into a flagship initiative backed by the governments of the regions themselves, with a more diverse donor base. As a result it became much more political in nature, and unfortunately tried to be all things to all people.”

Indeed, Martin Schneicel, from GTZ, one of the supporting agencies for the PCCBM, in an interview with BBC Radio 4 (2004) emphasised this point by suggesting that “today no one really represents the MBC. There are lots of different institutions working on different aspects of the corridor that contribute to the idea of the corridor, but so far there is not one organisation that coordinates everything and makes it clear to the general population what the MBC means and what they want people to do”. It is of no wonder, therefore, that with this lack of coordination and focus within the MBC, many conservationists today think that, even though over US $200 million (see table 5.6) are in play, the circumstances on the ground are not really changing (BBC Radio 4, 2004).

Not only has there been a shift from the Paseo Pantera to the present day MBC, but there has also been a shift in the guiding principles of the MBC itself over time. Initially, after the region’s governments had taken control of the initiative in the mid 1990s, the MBC reflected more of an interventionist approach, which, although somewhat obscured by the more recent neoliberal agenda, is still influential in the

objectives of the initiative today. A key MBC document that was prepared by the CCAD in 1996 (Proyecto Corredor Biológico Mesoamericano: Informe Técnico) stated that the original aim of the MBC was;

"to implement a strategy of action over the short and long term aimed at strengthening and consolidating the national systems of protected area, buffer zones and biological corridors, unifying these actions in such a way that this integrated system has a value for conservation of biodiversity" (CCAD, 1996; 1).

However, a few years later in 1999, in the proposal document for the Establishment of a programme for the consolidation of the MBC (PPCBM) (section 5.15), the MBC is described as;

"a land planning system, integrating conservation and sustainable uses of biodiversity in the framework of economic development priorities over the medium and short term" (UNDP-GEF, 1999; 2).

Whereas the main focus in 1996 was on consolidating the national systems of protected area conservation, in the MBC definition given by the PPCBM documentation in 1999, a shift to a more neoliberal perspective can be identified among the governing institutions behind the initiative, reflecting a shift in the balance of power between different interpretations of the concept of sustainable development, the foundation upon which the MBC is based. Whilst this definition reveals a subtler neoliberal outlook, it was not until a few years later, with the creation of the MBC Business Plan that the articulation of neoliberal positions became more clearly evident.

In the MBC Business Plan (see section 5.1.4 of this chapter), the focus was placed on 6 main strategic areas of action - 1) harmonization of policies; 2) valuation of natural resources and economic instruments; 3) communications; 4) sustainable production; 5) strategic information and 6) management of natural areas (CCAD, 2002d; 17). Although the final ‘strategic action area’ is conservation orientated, many of the action areas exude a neoliberal emphasis, especially with the idea of putting a price to nature through the ‘valuation of natural resources’, assigning property rights, and trading these services within the global market (Daily 1997; Roberts & Thanos, 2003), all of which reflect the ideas of nature commodification and market environmentalism put
forward in chapter 2. The idea of selling nature was also clearly expressed in a document prepared by the CCAD (2003a; 6), which stated that;

"through the sustainable use of natural resources, the Corridor offers many opportunities to increase foreign investment, create jobs, generate economic revenues and fight poverty".

Ricardo Ulate, an environmental impact assessor for SETENA, emphasised this neoliberal stance by suggesting that “if you are not able to realise the value in economic terms you are not going to be able to socially value these resources”. Martin Schneichel, the senior technical advisor for the German Technical Cooperation, also supported this view of the centrality of valuing nature suggesting that “biodiversity is the major potential for economic development here in Central America.” (Nica Times, 2006). Although, biodiversity may be a potential driving force for economic development in the region, it is how the biodiversity is used to generate this development that must be questioned. In interviews conducted for this research, representatives from many Costa Rican and Nicaraguan based NGOs expressed their concerns over the recent shift within the MBC principles to the pursuit of these market-oriented opportunities. These NGO representatives, made it clear that the organisations behind the MBC initiative “are not interested in conservation, only in exploitation” (Martinez, 200581) and appear to be only striving to provide “the best conditions for investors” (Garcia, 200582). According to Gustavo Oremuno83 from Ditso (an NGO that fights for indigenous rights in Costa Rica) within the MBC “natural resources are not protected for conservationists sake but with the intention of exploiting them economically in the future, especially by pharmaceutical companies”. It would therefore appear that, over more recent years, this neoliberal focus has indeed taken over as the main driving force behind the MBC; a change which can be attributed to a shift in the MBC’s governance and its guiding principles (reasons for the changing nature of the MBC will be explored in more detail in section 5.3). This has meant that today, as Dettman (2006; 20; 25) points out;

81 Clemente Martinez, Campaign Coordinator Centro Humboldt (research institute) - Interview held in Nicaragua on 17th May 2005.
82 Grace Garcia, Representative COECO La Ceiba (environmental NGO) - Interview held in Costa Rica on 18th January 2005.
83 Gustavo Oremuno, Representative DITSO - Interview held in Costa Rica on 4th November 2004.
the economic goals of the MBC are emphasised over the founding principle of biodiversity conservation... as what originated as a program to preserve global diversity is now a standard development agenda geared towards improving the economic vitality of the region"

As a result of the increasingly neoliberal nature of the MBC and the broadening of its goals, there are now concerns among the conservation community that the initiative is trying to tackle social and economic problems that it may not be able to solve “thus creating the possibility of unrealistic expectations, a cascade of disappointment, and an erosion of support” (Chang, 2002). Alvaro Ulgalde84, one of Costa Rica’s pioneering biologists and the director of the ACOSA85 conservation area in Costa Rica, expressed these views by suggesting that “the MBC should pull us all together but it doesn’t. It’s a very wishy washy concept”. Even governmental environmental agencies in the region responsible in part for implementing the initiative, according to Miller et al. (2001; 5):

“have been accused by other sectors of government and independent groups of using the MBC primarily for political leverage and as a marketing tool to capture donor investments”.

These views were supported by an ex high functionary86 of the MBC who claimed that the “MBC is more a façade for capturing funds than consolidating the corridor itself” and is an opportunity to “stimulate and advance neoliberal policies in the region”. Having been given a $20 billion grant from GEF, he commented on the fact that the MBC tried to sell itself over and over again to make more money which he describes as “a big power game with big US companies” who are keen on exploiting the natural resources of the area to make a profit (chapter 6 explores in more detail how the MNCs are gaining increased accessed to the natural resources of the region as the MBC becomes increasingly linked with economic development strategies).

The ex-high functionary of the MBC, also made it clear that the MBC as it stands at the moment (2005);

84 Alvaro Ulgalde, Director ACOSA - Interview held in Costa Rica on 27th January 2005.
85 ACOSA – Osa Conservation Area, one of the 11 conservation areas of Costa Rica.
86 Ex High Functionary MBC (requested to be anonymous) - Interview held in Costa Rica on 20th January 2005.
"has nothing to do with conserving biodiversity and there is no way we could have linked parks from Mexico to Panama. I think the project is a failure and it didn’t take off as it was supposed to".

These sentiments were also shared by biologist Jim Barborak (2001; 8) from the Wildlife Conservation Society, who, at a forum held by the World Resource Institute, CCAD and MBC team in 2001, expressed his concern about the changing nature and direction of the MBC. Mr Barborak hoped that;

"the MBC would desist from what sometimes appears to be an effort to be seen as the most politically correct conservation project in the region, while investing mainly in topics and places of secondary importance for the conservation of threatened species, and without adequate scientific rigor."

He then continued to say that;

"if that tendency continues, the project will increasingly be used as a case study and a poster child for how NOT to achieve conservation by promoting populist ideas, creating false expectations and spending a great quantity of money without having a clear mission or tangible results".

The extracts from interviewers cited above make it clear that the MBC has shifted its agenda over the last decade and has acquired more of a neoliberal outlook than had been envisaged at its inception. The next section explores the reasons driving this change and the key players who have influenced this transformation.

5.3 Reasons for the change
5.3.1 The Role of International Financial Institutions and Neoliberal Governments

The MBC initiative arose at a time when not only had the world started to recognize the planetary value of biodiversity, but also at a time when neoliberalism was becoming the more dominant economic model (section 3.2.2). With this global pursuit of neoliberalism and the increasing prominence of free market capitalism, nature started to be seen as more of a product to sell, rather than anything of altruistic value (chapter 2) (World Rainforest Movement, 2003a). Indeed, the rise of neoliberal ideologies and the changing attitudes towards nature were demonstrated within the international community when just two years after the Rio Earth Summit,
having committed themselves to protecting the global environment, governments met in Marrakech, (in conclusion to the Uruguay Round of the GATT) to discuss ways in which natural resources could be made profitable. As already discussed in section 5.2, the MBC, having originally had more of a biodiversity conservation emphasis, started to become more neoliberally orientated during the mid 1990s especially with its shift in governance. Jorge Cabrera\textsuperscript{87} made this clear by suggesting that;

"in 1993 all of Central America had environmental authorities which had happened in parallel with the Earth Summit and the progress of the MBC began to start. Then came this new generation of politicians with different views and the Rio processes started to lose its importance. They had different views about development with more of a focus on economic development instead of development that takes into account a balance between economic, social and environmental aspects."

The shift described within the MBC resulted in the initiative becoming more of a political conceptual framework in the hands of politicians, who in the pursuit of neoliberalism were prioritising export led growth, privatisation and trade liberalisation. Carlos Manuel Rodríguez, the Minister of the Environment (MINAE) in Costa Rica, made this clear by stating that "the MBC is a concept which works to our advantage as it is flexible". He then emphasised the fact that "environmental conservation is a good business". This reflects how, according to Primack (1998; 585), host governments often want to proceed with large initiatives such as the MBC, in the belief that they will "provide temporary jobs, economic prosperity and some release from social tensions for the duration of the project". These examples highlight the importance of understanding that neoliberalism cannot just be seen as an external imposition from outside actors such as the World Bank and the IMF but it also takes root in specific forms within regional governments and political movements. As Peck (2004; 396) argues, it is essential to;

"track actual patterns and practices of neoliberal restructuring and to make meaningful part-whole connections between localised and institutionally specific instances of reform and the wider discourses and ideologies of neoliberalism; otherwise the concept of neoliberalism has little, if any, utility".

\textsuperscript{87} Jorge Cabrera. Ex – Secretary CCAD (1996 –2000)– Interview held in Guatemala on 22\textsuperscript{nd} July 2005.
This direction that neoliberal reforms have taken in Central America has resulted in the region’s governments rarely acting as “effective delivery agents” (BIC, 2004a) as their ability to play constructive roles in environmental management are severely reduced by their institutional weaknesses including corruption\(^{88}\) and their lack of technical, administrative and financial abilities (see chapter 7 for a more in depth discussion) (Miller et al., 2000). These insufficiencies have been particularly accentuated with the uptake of neoliberal reform in the region, especially with the introduction of SAPs during the debt crisis, in the 1980s (section 3.2.2). With the adoption of the MBC by the region’s governments in 1997, therefore, it is of no wonder the initiative has been tied into neoliberal policies. As Lorenzo Cardenal\(^{89}\), the ex-director of the MBC (2001 –2005), pointed out:

"the region received this new wave of initiatives when our governments were weaker than ever and corruption adds to these weak institutions... all of this was happening at the same time that the IMF and the World Bank were introducing Structural Adjustment Programmes”.

Chapter 3 (section 3.4) discussed the coincidence of the emergence of the environmental agenda and the creation of the CCAD (the institution overseeing the MBC) at a time when neoliberalism was being consolidated regionally and when SAPs were being launched. This could be interpreted as a way of regional governments, dictated to by IFIs, influencing environmental policies in a more neoliberal way. According to Fredy Miranda\(^{90}\) of PROSIGA, an environmental management project focusing on pollution issues coordinated by the CCAD as part of IMDS (one of the PPP initiatives - see chapter 6):

"The Secretary in El Salvador of the CCAD is weak in competence and in finances because the system of integration of Centro America (SICA) is very weak too. They depend too much on international cooperation”.

This ‘dependence’ is one of the influential driving factors behind the changing direction of the MBC because governments and their subsidiaries such as the CCAD have to cooperate with international financial institutions (IFIs). This calls in to

\(^{88}\) According to Epstein (2005) “corruption is a major reason why 43% of Latin America’s 511 million inhabitants live in poverty and lack decent health care, education and the prospects of a better life”.

\(^{89}\) Lorenzo Cardenal, Ex General Director MBC - Interview held in Nicaragua on 5\(^{th}\) May 2005.

\(^{90}\) Fredy Miranda, Representative PROSIGA (CCAD) - Interview held in Costa Rica on 7\(^{th}\) January 2005.
question the actual governance of the MBC and who or which institutions are actually in charge.

The World Bank is one of the main funding agencies for the MBC. As explained in section 5.1.5 of this chapter, through the corridor's consolidation programme (PPCBM) the World Bank finances the initiative via a series of national projects by channelling its funds through the GEF, which are then implemented by the UNDP and managed by the CCAD. However rather than viewing the MBC as a strategy to aid the conservation of biodiversity in the region, the World Bank (2001a; 2) views the initiative as an “organising principle around which to promote investment, create employment, generate income and combat poverty” with the aim “to mainstream the initiative as part of the national and regional economic agenda” (World Bank, 2003; 4). Indeed, the MBC, according to Douglas Graham, a representative from the Bank, is a strategic vision from all Central American countries “that supports our objectives as a bank. It was the perfect match for us and it was home grown”. In this way, and as stated in an evaluation of the World Bank’s Development Report prepared by the Heinrich Boll Foundation (2002b; 43) “it is very clear that what is still paramount [for the Bank] is economic growth and against this overarching goal, ecological and social costs have to be balanced”. In an interview for this research in 2005, Dr Celia Harvey91 of CATIE, whilst discussing the priorities of the World Bank, asserted that “the World Bank put minimal percentage of their money into conservation and they are just paying lip service”. This minimal percentage is indeed true as the World Bank are putting considerably more money into projects that are not directly related to the MBC - such as transportation, energy sectors and infrastructure - than they are into projects that are directly associated with the MBC such as biodiversity conservation and watershed management (Section 5.1.3). Indeed, even the World Bank’s Environmental Strategy prepared in 2001 suggests more of a focus towards improving the quality of growth, especially within the private sector (World Bank, 2001b). The increasingly political nature of the MBC, as revealed during email correspondence with Jim Barborak92 of the Wildlife Conservation Society, has led to “huge investments only marginally related to biodiversity conservation” and Pascal

91 Dr Celia Harvey, CATIE - Interview held in Costa Rica on 28th June 2005.
Girot of the UNDP noted that “the MBC is not the core of the World Bank’s business to conserve biodiversity”. Indeed, the effect of many projects supported by IFIs such as the World Bank is “to exploit natural resources to create exports for international markets” (Primack, 1998; 579). Danilo Saravia, from the MBC coordination team in Managua made this clear by suggesting that “the World Bank is a bank and that comes first and they are only concerned about environmental issues as they can affect the economy”.

The actions and tendencies of the World Bank in relation to the MBC, seem to place the emphasis on investment, employment and income rather than sustainability and biodiversity conservation, emphasising the fact that nature can be sold to make a profit (see chapter 2). The Bank can be viewed as using market driven solutions and perspectives “as the only way to deal with environmental problems” and seeing biodiversity as “a public good” reflecting commercial possibilities (Heinrich Boll Foundation, 2002b; 38, 43). Yet, in the Bank’s defence, Douglas Graham suggested that “the World Bank want win-win situations. You can’t just focus on protected areas, it has to be linked with economic development”. According to Delgado (2002: 15), however, win-win strategies usually only provide solutions for the ecological crisis through “investing in projects that permit to exploit biodiversity in a capitalistic way”. With this in mind, it can be said that the MBC is being used to the World Bank’s advantage by allowing them to take control of what they view as an impeding factor on the economy, such as the environment, and potentially making money out of it.

In an interview with Douglas Graham, he asserted that “the World Bank have no preference where the money is spent. It is the governments that decide”, however Mario Boza93 opposed this view stating that “the governments do not have direct involvement in the corridor”. This may suggest that whilst the regional governments may appear to be in charge of the MBC, they are unduly influenced by the more powerful IFIs and have no other choice but to invest the money in economic...
development projects. As Martin Kappelle\textsuperscript{94} from The Nature Conservancy noted, “now it’s about using the MBC to get development projects, there is a lot of emphasis on road building”. Consequently, it could be that the MBC has become just another strategy to boost the economies of the region by commodifying nature, selling it as a ‘product’ and using ‘environmental services’, enabling the region’s governments to pay back their debts to the main lending institutions. Through such actions, according to World Rainforest Movement (2003a), “conservation not only becomes yet another business, but also serves as an attractive pretext to capture funds aimed at sustainable development whatever it may be”. So from what started as a well-intentioned biological corridor, the MBC initiative has now become firmly entrenched in the neoliberal agenda, being led by corrupt politicians\textsuperscript{95} who have “no strategic vision for the nation only entrepreneurial interests” (CIEPAC, ND), and who at the same time are being dictated to by IFIs such as the World Bank and neoliberal governments from outside the region. In conclusion to this section, as the Heinrich Boll Foundation pointed out in their evaluation of the World Bank’s World Development Report (2002b; 46);

“the Bank has become an institution that the average person does not trust. In addition it is also widely perceived to be a source of corruption in governments and a facilitator of corrupt environments”.

5.3.2 Other Interested Parties Involved in the Implementation of the Regional MBC

Apart from the IFIs and neoliberal governments there are other interested parties involved with the implementation of the MBC e.g. international organisations supporting the MBC at the regional and national level, which may influence its direction. The two other implementing agencies of the GEF grants that work along side the World Bank in the MBC initiative are the UNDP and UNEP (see section

\textsuperscript{94} Martin Kappelle, Regional Coordinator The Nature Conservancy - Interview held in Costa Rica on 18\textsuperscript{th} November 2004.

\textsuperscript{95} Several Costa Rican and Nicaraguan presidents have either been accused or convicted of corruption over the last decade. Both former Costa Rican President Abel Pacheco and the present Nicaraguan President Enrique Bolaños have been at the centre of an investigation since supposedly illegal campaign financing. Bolaños' predecessor Arnoldo Alemán (1997-2002) was convicted in late 2003 and sentenced to 20 years in prison for money laundering. Three former Costa Rican Presidents have also been connected to two large corruption scandals; Rafael Angel Calderón Jr. (1990-1994) is in prison after being convicted of a corruption case involving Social Security funds; Miguel Ángel Rodríguez is under house arrest (1998-2002) after a corruption scandal involving a telecommunications deal with a French firm Alcatel and former President José Maria Figueres (1994-1998) is now under the watchful eye of the Prosecutor's Office (Barry, 2004; Cevallos, 2004).
5.1.3). The UNDP is interested in supporting regional efforts to attain the principles of sustainable development, and the UNEP is interested in supporting cross-border management of fragile ecosystems (UNDP-GEF, 1999). According to Olga Corrales96 a representative from the UNDP;

"the UNDP has three lines of work in the environment - 1) assisting the country in complying with international commitments protecting global public goods such as ozone layer and biodiversity; 2) working with local communities with small grants which is financed through donors; 3) improving and creating capacity at the national level for carrying out certain policies."

Sra Corrales then continued to say that the UNDP "were the implementing agency for the local tract of the regional MBC". Although the World Bank, GEF, UNDP and UNEP have been criticised for working primarily to benefit US interests through the MBC initiatives, as well as their European allies (Delgado, 2002), it is clear from the objectives of the UN, that they are not as neoliberally-orientated as the World Bank's. The UNDP's more social focus can by demonstrated, for example, by the concern that the organisation expressed in 1997 about the impacts of the structural adjustment programmes in Nicaragua believing that SAPs would merely exacerbate the already difficult economic situation of the country. The UNDP therefore called on the Nicaraguan government and the IMF "to draw up a new structural adjustment program (ESAF) which would take into account not only economic and financial objectives, but also social concerns" (Vukelich, 1997; 1). Lorenzo Cardenal further emphasised the UNDP's social focus by suggesting that "the UNDP have a clearer social and environmental approach than the World Bank" especially when, as Pascal Girot, pointed out "the UN insist on education and human development". Indeed the recent publication of the United Nations Millennium Goals Report (2006) outlined their human development and education agenda demonstrating a commitment to eradicating poverty and hunger, achieving universal primary education, promoting gender equality and empowering women, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria and other diseases and finally ensuring environmental sustainability (UN, 2006). However, whilst the UN may have a social and environmental influence on the MBC, it is the World Bank, which

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96 Olga Corrales, Environment Programme Office UNDP - Interview held in Costa Rica on 24th January 2005.
has the most influence at this international institution level due to its financial power and hold over national governments and their decision making.

The German Technical Cooperation, GTZ, is another one of the main players supporting the MBC initiative that has been involved since its move away from the Paseo Pantera. The GTZ is an UNDP-UNEP partner in issues related to the strengthening of investments in the construction of the MBC at the national level. It aims to maintain the strictest technical focus and to help in the coordination of different institutes at the national level (UNDP-GEF, 1999). According to a GTZ representative interviewed in Managua, the GTZ

"help the CCAD build up structures and elaborate strategies so they can manage MBC in future. We are asked for cooperation, and we try and plan a certain project together".

As GTZ contribute less than half the money to the MBC initiative compared with the GEF-UNDP (section 5.1.3), their influence is not as strong. Nevertheless, it was interesting to hear Schneicel’s views on the World Bank as he felt that, “the World Bank wants to coordinate, give ideas and influence, but nobody wants to be coordinated and nobody wants to take ideas developed by other people”. Not only does this comment demonstrate the potential difficulties that can be experienced with regard to stakeholder participation, but also it implies that even amongst the institutions at the regional level, there can be and are conflicts into how the MBC initiative should be executed.

Other international agencies involved in the support of individual projects associated with the MBC are USAID; an organisation which has provided financial support for projects within the MBC initiative and was one of the first agencies involved with the funding of the Paseo Pantera. The PROARCA project (section 5.1.3) is currently being implemented by USAID, which supports regional policy integration and pilot projects with a focus on coastal zones and protected areas. The Danish Development Agency (DANIDA), too, has provided assistance for MBC projects based on the agency’s long standing-interests in rural development and issues affecting the well being of women, campesino groups and indigenous communities. In this way DANIDA recognises the central importance of grassroots participation to the stability
of the MBC coordination efforts (see the discussion on the incorporation of the Social and Productive Component of the MBC below) and as such, helps to promote and maintain the participation of these key stakeholder groups (UNDP-GEF, 1999). Unfortunately their emphasis on grassroots rural development and environmental protection seems to have limited the influence that GTZ, DANIDA and USAID (who operate out of the Western governments of Germany, Denmark and the USA respectively) have had on the MBC when compared with IFIs such as the World Bank.

Not only are there those agencies such as the ones mentioned above involved in the implementation of the MBC, but promoters of the MBC have been trying to incorporate indigenous, campesino and black communities into the corridor initiative and encourage improved participation (IUCN, 1998). Having been criticised for ignoring the importance of rural communities in conservation by NGOs and local communities alike, the governing bodies behind the MBC decided to incorporate a stronger social dimension to the initiative (World Rainforest Movement, 2001). In 1998, ACICAFOC (La Asociación Coordinadora Indígena y Campesina de Agroforestería Comunitaria de Centroamérica), an organisation made up of fifty Central American campesino and indigenous organisations founded in 1994 proposed the idea of incorporating an Indigenous and Campesino Corridor. The idea was initially resisted by promoters of the MBC, until after the devastation of Hurricane Mitch\(^\text{97}\) in 1998, when the work of ACICAFOC demonstrated that the activity of local peasants and indigenous people was essential both to reduce the vulnerability of the region and to promote rapid recovery of the affected areas (Varela, 2001). As a result, and with the governing bodies behind the MBC realising the importance of incorporating local communities into the initiative, ACICAFOC's proposal was incorporated into the initiative as a Social and Productive Component (SPC) in 1999 (World Rainforest Movement, 2001). The SPC aims to protect and conserve the natural resources of Central America as well as stimulating

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\(^{97}\) At the end of October 1998, according to Mowforth (2005; 16) Hurricane Mitch "deposited more than the region's annual average rainfall on Nicaragua, Honduras, El Salvador and Guatemala". These torrential rains lead to flooding and landslides causing death and injury, destruction of houses, crops, roads etc. Undoubtedly Hurricane Mitch was the worst natural disaster to have occurred in the Central American region over the last century (ECLAC, 1999 cited in Brown, 1999).
environmentally friendly productive activities within buffer zones (Varela, 2001). ACICAFOC is in charge of the coordination and direction of SPC and is seeking to build strong links between natural and cultural biodiversity (World Rainforest Movement, 2001).

Even though the SPC element has been included into the MBC initiative, it does not mean that anything has changed within the initiative since 1999 and that the CCAD has actually taken concrete steps towards incorporating local communities more. As Randall Garcia\(^8\) from Inbio made clear;

"the organisations and institutions behind the corridor have promoted the participation of civil society and they have built a platform for many things, but there is nothing concrete".

Even the organisation behind the SPC, ACICAFOC, has been criticised for not actually doing anything in relation to the corridor and the president of ACICAFOC has also been questioned as to where the money that has been donated to build the project has been spent. According to Felipe Vega\(^9\) from JUNAFORCA (Junta Nacional Forestal Campesina- an organisation in Costa Rica that represents campesinos);

"ACICAFOC speak out in the name of Central American people, but they don't coordinate with anybody. Nobody knows anything about ACICAFOC. The CCAD made a mistake using them".

Not only does this comment emphasise a lack of coordination amongst stakeholders that has resulted in little action on the ground, but it could also suggest that ACICAFOC, whilst representing campesino and indigenous communities, has been used to conceal the more neoliberal pursuits of the MBC. The next section explores in more detail the impacts of the MBC at the regional scale.

\(^{8}\) Randall Garcia, Associate Director INBIO - Interview held in Costa Rica on 30\(^{th}\) November 2004.

\(^{9}\) Felipe Vega, Director JUNAFORCA- Interview held in Costa Rica on 6\(^{th}\) December 2004.
5.4 The Regional Impacts of the MBC

Having explored the changing focus of the MBC, this section now explores in more detail the type of impacts the MBC has had at the regional level. Indeed, the promoters of the MBC have already noted some of the initiative’s achievements. In addition to the achievements of the PCCBM noted in Table 5.9 in section 5.1.5, on a more general scale, the CCAD (2002d) have marked several advances and achievements of the MBC over the years. For example;

- Improved strengthening of its own institution as well as other government agencies in the planning and monitoring of projects;
- Execution of several studies on different methodologies for the valuation of natural sources;
- The launch of information campaigns in different media formats, although these have been of limited scope;
- Organisation of a number of disperse training activities in thematic areas related to eco-efficiency in business;
- Progress of building up information on the MBC through studies and research on scientific topics;
- Progress in the development of environmental monitoring systems; the documentation of a comprehensive vision of the MBC from the perspective of its inhabitants and its landscape;
- Progress in the consolidation of SICAP.

In spite of the initiative’s change of focus and the MBC’s increasing neoliberal orientation, some conservationists have also recognised some of the positive influences that the MBC initiative has had. In an interview for this research project in 2005, Sylvia Miran\textsuperscript{100} from WWF Central America acknowledged the more positive attributes of the MBC, asserting that;

\textit{“the MBC has achieved progress in terms of regional visions and agenda settings.. and comparing Central America to other regions, it has made progress in at least having an integrated vision and plan of action with sustainable development”}.

Whilst the initiative may have led to increased institutional awareness and improved agenda settings at the regional level regarding the environment, and has, as a GTZ\textsuperscript{101} representative pointed out, “improved institutional strengthening” through the PPCBM, it does not mean that five years after the start of the consolidation project

\textsuperscript{100} Sylvia Miran, Director WWF Central America- Interview held in Costa Rica on 18\textsuperscript{th} November 2004.

\textsuperscript{101} GTZ Representative – Interview held in Nicaragua on 10\textsuperscript{th} June 2005.
the MBC is working effectively and having tangible results on the ground (see chapter 7 for a more in depth discussion about the national and local impacts of the MBC in Costa Rica and Nicaragua). Indeed there has actually been little change in development priorities especially amongst the region’s governments as their main focus still remains to be boosting economic growth, which, within this neoliberal paradigm, is by no means a model which favours environmental protection or the welfare of the local people. Even the reconstruction processes after Hurricane Mitch in 1998, for example, despite the presence of sustainability rhetoric in government documentation, demonstrated a clear commitment towards consolidating the neoliberal model in the region (Brown, 2000a). In many ways, therefore, it would seem that the results of the multi-million dollar MBC initiative have been rather disappointing, as considering the amount of money that has been pumped into the MBC, one would have hoped for more tangible results. As the World Rainforest Movement (2003a) points out, protected areas today still “continue to be highly threatened and pilot projects promoted by MBC have not caused any substantial change in this situation”. Indeed, many of the NGOs that were interviewed for this research project which have an environmental and/or social focus to their projects, expressed their concern about the current direction that the MBC had taken. For example Steve Mack102 from the Osa Campaign, a network of NGOs working in the Osa peninsula in Costa Rica, criticized the poor organisation of the initiative by stating that;

“we don’t see much evidence of the corridor working. There is no central coordination. There hasn’t been a balancing of interests between conservationists and developers. The regional movement has been lost and dissipated, besides you can’t funnel your resources through a regional initiative”.

This comment emphasises several points. Firstly it indicates a potential lack of coordination between conservationists and developers, suggesting that perhaps the promoters of the MBC did not consult with other stakeholders or indeed incorporate their interests into the initiative. Secondly Mr Mack’s comment also makes clear the ineffectiveness of the top down approach adopted by the promoters behind the MBC, suggesting that if resources are channelled into the initiative they may become

102 Steve Mack, Representative CR-USA- Interview held in Costa Rica on 4th January 2005.
lost and unaccounted for. Indeed, other conservationists such as Alejandro Alvaraz from Conservation International also noted the fact that "the MBC is not really knowing where it is going at the moment, they haven't used their funds in the best way possible". In many cases, this lack of belief in the initiative has led some NGOs not to even use the guidelines that have been developed by MBC promoters to aid stakeholders with the establishment of corridors— an idea which Lorenzo Cardenal, the ex-director of the initiative had hoped for. This scepticism for the initiative was made clear in an interview with Martin Kappelle, the regional coordinator for the Nature Conservancy who commented that;

"we are not using the MBC as a vehicle for conservation and our environmental NGO partners are also becoming aware that the MBC is more political now and is not environmentally friendly".

This comment identifies the changing nature of the MBC over time and how, as result of the initiative's increasingly political nature, some key stakeholders prefer to initiate their own projects without having to cooperate with the MBC. In this way, therefore, the fact that the MBC initiative has been promoted

"without attempting to remedy already known problems, makes us think that there are other interests behind it, different from those of conservation, and that an attempt is being made to greenwash conventional development" (World Rainforest Movement, 2003a).

For example, an interview with Mario Boza from the Wildlife Conservation Society revealed that;

"the situation with protected areas is still exactly the same after 5 years, there are no new ones, no watersheds have been protected, no forest have recovered from deforestation. I'm not very happy with the results."

This comment makes one question what exactly has the MBC achieved since the governments took over the initiative in 1997 apart from a certain degree of

104 Lorenzo Cardenal, Ex General Director MBC - Interview held in Nicaragua on 5th May 2005.
105 Martin Kappelle, Regional Coordinator The Nature Conservancy - Interview held in Costa Rica on 18th November 2004.
106 A term that arose after the Earth Summit in Rio that is used to refer to the activity of giving a positive public image to environmentally unsound practices.
institutional strengthening and the publication of a few reports. Indeed, other members from the conservation community have also been disheartened by the lack of success of the corridor. In an interview with the Nica Times (2006), Jim Barborak, questioned the feasibility of combining development and conservation by saying that “almost universally, comparative studies have shown that most integrated conservation and development projects around the world have not met their goals”. These rather negative views were not only expressed by the conservation community, but also by those implementing and financing the project. A representative from GTZ working on the PPCBM made this clear by commenting that “even after three and a half years on working on the initiative, I’m not very positive about the outcome”. Indeed, Maritza Rivera from USAID, the funding body behind the Paseo Pantera made it clear that:

“if it’s hard to coordinate efforts and get everyone to agree in one country with the same policies and regulations, imagine how hard it is to get a regional project working where the resources are different and the level of interests of the governments vary”.

According to Chavaria (2001), the definition of the MBC defined by the Presidents of Central America in 1997 (Section 5.1.2) is a goal that is too difficult and ambitious to achieve, especially if there is a lack of coordination between governments. As mentioned in the previous section and as chapter 7 goes onto explore in more detail, although the CCAD has tried to incorporate more of a grassroots social element into the corridor with the implementation of the SPC (see section above), in practice, the MBC is still very top down orientated and fails to recognise the role of local people or seek their participation. As Jorge Cabrera, the ex-secretary of the CCAD made clear:

“top down strategies are ineffective. The approach has to be from the bottom up. I think the MBC has been successful at the regional level but it also needs to be successful at the local level”.

Pascal Girot from the UNDP noted the ineffectiveness of top-down strategies, stating that “the trickle down process within the corridor isn’t happening” as the impacts at

107 GTZ Representative – Interview held in Nicaragua on 10th June 2005.
108 Maritza Rivera, Representative USAID- Interview held in Nicaragua on 5th May 2005.
109 Jorge Cabrera, Ex – Secretary CCAD– Interview held in Guatemala on 22nd July 2005.
the national and local levels have been minimal (see chapter 7). In an interview for this research held in 2005, Sebastian Troeng\textsuperscript{110} from Caribbean Conservation Corporation, an NGO that conducts grassroots conservation projects in Costa Rica, confirmed the lack of trickle down by pointing out that “most mega projects like the MBC work on more of a theoretical level and there is a gap with local efforts”. From the evidence above, therefore, it would seem that;

"the implementation of the MBC at the local level has not been effective. One of the greatest shortcomings of the program is the lack of communication between locally-based projects and regional planning departments" Dettman (2006, 15).

An explanation for this lack of filtering down from the regional to the local level, as Donald Mendez\textsuperscript{111}, an academic from Universidad Centro Americana, Nicaragua, suggests is that “the MBC comes from the outside; and is from the perspective of the World Bank”, who, as a result of their neoliberal focus and drive behind the corridor, have not orientated the initiative in such a way as to benefit the people of Central America, but instead to benefit the neoliberal governments and multinational companies. Indeed, many NGO representatives expressed this point of view e.g. Grace Garcia\textsuperscript{112} of Coeco La Ceiba (an environmental NGO in Costa Rica) suggested in an interview in 2005 that “the MBC had become more a private strategy to tell communities that they are incapable to take care and manage their own resources”, and a way for IFIs and neoliberal governments such as that of the USA “to protect areas for exporting natural resources and products” \textsuperscript{113} an idea strongly linked to the Plan Puebla Panama and the DR-CAFTA, initiatives that will be explored more in chapter 6. To emphasise the top-down approach of the MBC, an interview with Clemente Martinez from Centro Humboldt in Nicaragua revealed that “the MBC has been a millionaire investment that has given no results, you cannot see the protection as there are no interests in conservation, only exploitation”. Indeed, Felipe Vega, supported this point, suggesting that “the MBC is purely cosmetic”, as it hides what is happening in reality – the valuation and commodification of natural resources ready to be bought and sold by corporations in the realm of the free market. These

\textsuperscript{110} Sebastian Troeng, Representative CCC – Interview held in Costa Rica on 9th November 2004.
\textsuperscript{111} Donald Mendez, Academic UCA - Interview held in Nicaragua on 28\textsuperscript{th} April 2005.
\textsuperscript{112} Grace Garcia, Representative COECO La Ceiba (environmental NGO) - Interview held in Costa Rica on 18\textsuperscript{th} January 2005.
\textsuperscript{113} Vera Varela, Director Fundacion Neotropica - Interview held in Costa Rica on 6\textsuperscript{th} December 2004.
comments suggest, therefore, that top-down approaches towards achieving sustainable development such as those adopted by the MBC have not been successful in the implementation of development, poverty-alleviation or environmental management programmes (Larson, 2001).

Although many NGOs express strong opposition towards the corridor, some do receive funding for their own projects within the physical corridor from the same institutions, organisations and outside governments that are funding the MBC regional initiative and many are involved in the implementation of constituent projects of the MBC itself (e.g. the World Wildlife Fund, The Nature Conservancy, Rainforest Alliance, Conservation International). This is an interesting observation, as on the one hand it could be that financial institutions, such as the World Bank, are supporting the more interventionist/ecocentric projects at the local and national level to give the appearance of being involved with something vaguely conservation-orientated. On the other hand these institutions may be attempting to influence the direction of the conservation projects, in the same way as they are influencing the region’s governments, and promoting a subtle neoliberal focus. At the same time, institutions like the World Bank seem to not have a clear and unified focus of what they are doing across all their departments i.e. the more environmentally focused departments within the World Bank fund and supervise individual projects run by NGOs whilst those responsible for broader policy development implement contradictory policies at the regional level. As these suggestions only begin to touch on the complexities of the dynamic relationships among the state, IFIs and the NGO sector and their impact on the MBC initiative, chapter 7 will discuss these issues in more depth.

The changing nature of the MBC and its increasingly top down approach towards sustainable development, may have also had an impact on how effectively funds that have been allocated to the initiative have been spent. For example, when the Belize Coordinator of the MBC was asked in an interview held by the BBC about what they actually do she revealed that "we have been facilitating NGOs with meetings, we haven’t done anything on the ground. We have made people aware about what biological corridors are about and internalised the concept of them in schools. Our
budget to do this has been between $80,000 to $150,000”. Not only does this emphasise a gap with local efforts, but one also has to wonder why Belize, considering the hundreds of millions of dollars that have been pumped into the MBC, perhaps did not receive more money to facilitate more grassroots environmental projects. However as Martin Schneicel from GTZ made clear “no one really knows how much money has been spent on the initiative, about $200 million or even more but no one knows where it has been spent” (BBC, 2004). According to Carlos Manuel Rodriguez, the Minister of MINAE “the money is being spent on capacity building in the MBC”. But what exactly is capacity building in this regard? Felipe Vega¹¹⁴ from JUNAFORCA, wondered, “how they [institutions behind MBC] could spend millions of dollars in consultation?” and in an interview for the BBC, Emma Caddy from Flora and Fauna International stated that

“the MBC hasn’t provided us with any tangible benefits. We have attended workshops and that’s it. It has left us a little bemused about what the MBC has accomplished and what it means at the grassroots level.”

Indeed, many of the members of the three local communities interviewed for this research around three separate protected areas (two in Costa Rica and one in Nicaragua), confirmed that they had never even heard of the MBC initiative. In an interview for this research in 2005, Andrea Meza¹¹⁵ from CEDARENA a Costa Rican NGO working on environmental law, asserted that the MBC “have invested a lot of money that has disappeared and it is all very corrupt. The regional corridor just isn’t working. It’s a mess and there are no tangible results”. She then continued to say that “a lot of people in the CCAD have huge salaries but yet there are no results on the ground”. These comments underline how the MBC, since it was taken over by the regions governments, has taken on more of a neoliberal orientation, and it is an initiative that has little or no emphasis at the grassroots level. As discussed earlier, the MBC, when it was originally taken over by the region’s governments, had more of interventionist approach. However, with the wave of global neoliberalism towards the end of the 1990s, a new generation of politicians started to gain power who were more focused on “economic development instead of development that takes into

¹¹⁴ Felipe Vega, Director JUNAFORCA - Interview held in Costa Rica on 6th December 2004.
¹¹⁵ Andrea Meza, Director CEDARENA - Interview held in Costa Rica on 6th January 2005.
account a balance between economic, social and environmental aspects” (Cabrera, 2005116). In this way, the MBC initiative has become more of a top down initiative that merely satisfies the neoliberal objectives of the region’s governments and IFIs as well as the whims of MNCs, rather than an initiative that directly benefits the region.

5.5 Conclusion

The shifting agendas of the MBC from its roots as the Paseo Pantera show a phenomenal change in priorities and objectives. The MBC’s more recent neoliberal focus, which has been directed by servile and neo-liberally minded governments and influenced by IFIs and outside governments, has resulted in an unfocused strategy that is too politically top down and complex, providing very few tangible results on the ground. As the financial support of the PPCBM ran out last July 2005, there seem to be very few options ahead for the MBC regional initiative at present. According to Archie Carr III (2006) who attended a CCAD meeting in October 2005;

"the CCAD intends to continue with the MBC themes and most of their goals are tied up in PARCA117. Apparently GEF of World Bank will indeed resume funding”.

However, with the ongoing integration process of the Central American countries under the SICA, the MBC seems to be getting lost within the amalgamation of agendas, where the economy is predominant over the environment. Even though the MBC may continue under the premise of PARCA, another regional initiative seems to be capturing the attention of the MBC; the Plan Puebla Panama (PPP), an initiative which aims to integrate the infrastructure and economies from the Mexican State of Puebla to Panama (BIC, 2003). Given the scope and transboundary nature of the MBC it is inevitable that large projects like the PPP may encroach upon its spatial and conceptual boundaries and affect its dynamics, financing and impacts. Once the two initiatives, especially in the days of the Paseo Pantera, would have been poles apart in their objectives, but now the two seem to embody a “strategy of capitalisation” (Toly, 2004; 1), which in part is attributable to the forces of globalisation. The Plan Puebla Panama (PPP) not only overlaps geographically with the MBC and has some

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116 Jorge Cabrera, Ex – Secretary CCAD– Interview held in Guatemala on 22nd July 2005.

117 PARCA is the Environment Plan for the Central American Region – an instrument which guides the region’s work with respect to the environment and sustainable development - see chapter 3 section 3.4.
similarities in terms of its listed objectives but also many of the key actors involved in the implementation of the PPP are influencing the development of the MBC. It is not surprising therefore that now there seems to be a lot of confusion as to what the MBC represents, what it has become and whether or not it is a part of the PPP or indeed if it is becoming apart of the PPP. The next chapter will explore in more detail the PPP and its relationship with the MBC and how the PPP, and more indirectly, the Central American Free Trade Agreement, will impact on the future direction of the MBC either in a positive or a negative way.
6. The Impacts of Contemporary Regional Economic Development Strategies

“For 200 years we’ve been conquering Nature. Now we’re beating it to death”.


6.1 Introduction

Having explored the MBC initiative from the regional perspective in Chapter 5, it is important to recognise that this initiative cannot, and should not, be looked at in isolation. Elsewhere within the Central American region, other concurrent initiatives are being implemented. Arguably the two most important are the Dominican Republic-Central American Free Trade Agreement (DR-CAFTA – see section 6.7), which aims to open markets, deregulate trade and privatise services across the region, and the Plan Puebla Panama (PPP), an infrastructure initiative launched by both Mexico and Central America’s governments, which uses the neoliberal reform of the region as a launch pad for development. The two are interlinked, as the projects within the PPP will be important for providing the physical infrastructure for the successful implementation of the DR-CAFTA. Reflecting the continued domination of neoliberal ideologies in the region (see chapter 3 for a discussion of the background to the rise of neoliberalism in the region), therefore, these initiatives, like other manifestation of neoliberal reforms in the region, may both have an enormous impact on the implementation of the MBC influencing its direction and the guiding principles. Although the MBC, as we have seen in chapter 5, has itself gradually adopted a more neoliberal focus, it may become even more locked into the neoliberal paradigm if it becomes intertwined with these two contemporary economic initiatives. The first part of the chapter explores in more detail the Plan Puebla Panama via an exploration of its social and environmental impacts and how it links into the MBC and the second part of the chapter will then move on to consider both the MBC and the PPP in the larger framework of DR-CAFTA.
The Plan Puebla Panama is a development plan, initiated in 2001 with a 25-year scope that is developing alongside the MBC. The PPP, through a series of programs initiatives that contain individual projects aims to strengthen Central American integration and to promote the development of the region’s infrastructure and economies. It stretches from the Mexican State of Puebla (Campeche, Chiapas, Guerrero, Oaxaca, Puebla, Quintana Roo, Tabasco, Veracruz and Yucatan) to Panama, an area that covers nearly 375,000 square miles and has 64 million inhabitants (57% in Central America and 27% in Mexico) (IADB, ND; Musfeldt, 2003; BIC, 2001; Gonzalez, 2001). The aim of this mega-project is to open up the southern half of Mexico and Central America to private foreign investment by providing the physical infrastructure necessary to establish a firm foundation for not only DR-CAFTA (this agreement will be discussed in more detail in section 6.7) but also the proposed Free Trade Area of the Americas (FTAA or ALCA its Spanish acronym) - an agreement designed to provide free market access for goods and services to the entire continent (Cappi, 2003; ACERCA, 2003) The PPP incorporates an elaborate infrastructure of ports, highways, airports and railways aimed to connect the development of petroleum, energy, industry and agriculture (Cappi, 2003). With the integration processes that have been occurring during the last few decades within Mesoamerica, the instigators of the PPP claim that it offers a unique ‘conceptual umbrella’ under which other ongoing regional projects can be gathered; for example, the system of electrical integration (SIEPAC) that has been in operation since the 1980s, as well as the MBC itself which is now also viewed as a potential axis for sustainable development (see section 6.6) (Pickard, 2004; Presidencia de la Republica, Nicaragua, NDa).

During the mid 1990s Central America’s governments had started to consider separate regional infrastructure and natural resource management projects such as SIEPAC (Electricity Interconnection System for the Central American Countries) and the MBC from an integrated perspective especially following the signing of ALIDES (section 3.4). These ideas were also central to a series of
proposals for macro and micro economic, social and environmental issues put forward in the INCAE\textsuperscript{118}.HIID\textsuperscript{119} 1999 publication *Competitiveness agenda for Central America towards the 21\textsuperscript{st} Century* (Presidencia de Nicaragua, 2005; CCAD-INCAE, 2004). Then in September 2000 during a working visit to Central America, Mexico’s former President, Vicente Fox\textsuperscript{120} (2000 – 2006) began to talk about the possibility of an integrative initiative for the region whose “main objective would be regional economic and human development” (Olvera, 2002; 2). Originally, this had been a national Mexican initiative based around an agreement known as the *Comprehensive Development Plan for Mexico’s South-South Eastern Region* which was signed by Ex-President Fox and the governors of these states. However, the importance of the geopolitical relationship between the south of Mexico and Central America, and the fact that the two areas share similar economic and social problems as well as historical and cultural roots, led Ex-President Fox to propose the widening of the project to encompass the whole Central American region. This eventually culminated in the proposal of a regional development initiative to the Central American governments in November 2000. This geographically more extensive initiative would, he proposed, cover the area between Panama and Puebla (a town in Mexico) (Olvera, 2002). According to a document prepared by the adjunct coordinator of the PPP support team Ennio Rodriguez (2002; 3) the Plan “was enthusiastically received by the various governments of the countries concerned”. Also present during the meeting of Presidents in November 2000 were directors of the Central American Bank for Economic Integration (CABEI), the Inter-American Development Bank (IADB) and the Economic Commission for Latin America and the Caribbean (ECLAC), who, together with INCAE

\textsuperscript{118} Founded in 1964 by the business community and the governments of the Central American nations, the Central American Institute of Company Administration (INCAE) is a private, non-profit, multinational, higher education organization devoted to teaching and research in the fields of business and economics (INCAE, 2006).

\textsuperscript{119} Having been dissolved in 2000, Harvard Institute for International Development (HIID) was Harvard University’s multidisciplinary centre for coordinating development assistance, training and research in Africa, Asia, Central and Eastern Europe, and Latin America. Their aim was to help towards the design of policies to accelerate the economic growth of these countries as well as to improve the welfare of the people (HIID, ND).

\textsuperscript{120} At the time of writing the thesis the President of Mexico changed from Vincente Fox to Felipe Calderon after the July 2006 elections. However the chapter focuses on Fox and his administration as the PPP was created at the time when he was in power.
Soon after this meeting a PPP Executive Commission (EC) was formed comprising Presidential Commissioners from Mexico and from each of the Central American countries, each of whom has direct access to their respective heads of state. This EC decides by consensus which initiatives and projects are to be promoted as part of the Plan. In March 2001, at a meeting of the Regional Consultative Group\(^{122}\) in Madrid, Central America representatives presented a document entitled the *Regional proposal for the transformation and modernisation of Central America in the 21\(^{st}\) Century* (comprising 32 projects), which contained a proposal for the funding of series of regional projects that had been developed consensually by these countries. The government of Mexico had also prepared a Plan Puebla Panama proposal (comprising 25 projects) that identified programs for Mexico's south-south eastern region along with a Mesoamerican strategy (Rodriguez, 2002; Presidencia de Nicaragua, 2005). In order to identify the interrelationship and the shared goals between the proposal put forward by the Central American countries and Ex-President Fox’s PPP proposal, the GTI submitted a report to the PPP Executive Commission in a meeting that took place in May 2001 in San Salvador. It was at this meeting that the eight PPP initiatives which have come to constitute the PPP were defined (see section 6.3) (Presidencia de Nicaragua, 2005). At a meeting held later that month the Commissioners reached an agreement as to which individual projects would form part of the eight initiatives (see table 6.2). On June 15\(^{th}\), 2001, the PPP was formally launched at the Tuxtla’s Mechanisms\(^{123}\) Special Summit at San

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\(^{121}\)The Inter-institutional Technical group (GTI) is a committee in charge of promoting and seeking financing for the PPP (Olvera, 2002)

\(^{122}\)Consultative groups are meetings where debtor nations like those in Central America meet with donors (e.g. the IFIs, regional organizations like the IADB and individual donors such as USAID, other European governments etc.) to discuss debt relief, funding programmes, project proposals etc.

\(^{123}\)The Tuxtla Mechanism, established in 1991, is an intergovernmental forum that helps the continued consolidation of the 7 countries of Central America and Mexico. It aims to analyse periodically and systematically the many sub-regional, regional, hemispheric and world issues of common interest: agree joint positions in different multilateral forums; advance towards the establishment of a free-trade area; promote joint economic projects and propose regional cooperation in all fields to support the areas sustainable development (CIEPAC, 2005: Presidency of the Republic, Mexico, 2002).
Salvador, El Salvador (Rodriguez, 2002). According to the Declaration of the Summit of the Tuxtla Mechanism (2001), the main objective of the PPP is;

"to leverage the human and ecological wealth of the Mesoamerican Region within a framework of sustainable development that respects cultural and ethnic diversity".

Sustainable development is therefore considered by those promoting the PPP as central to the objectives of the PPP. The concept is therefore seen as an instrument to promote economic and social development by permitting the necessary infrastructure construction, without causing environmental damage (Presidencia de la Republica, Nicaragua, NDa). The PPP aims to stimulate cooperation in the sustainable use of resources in order to overcome the region’s historical deficit of physical infrastructure, and reduce poverty rates as well as its vulnerability to natural disasters. These integration efforts are intended to strengthen the region in response to the perceived need for deepening its insertion into the global economy. In this way, the PPP promoters see the Plan as not just a regional political strategy that intends to establish and indeed renovate strong relations between the Central American isthmus nations, but also as a strategy that can enhance the economic power of the region (Ramirez, 2003). The guiding logic, therefore, behind the PPP is that in order to take better advantage of the region’s extensive natural resources and its strategic location for international commerce, Central America and southern Mexico have to make themselves more attractive to foreign investment (Do or Die, 2003). Table 6.1 describes the main theoretical and philosophical pillars on which the PPP is based.
Table 6.1 - Central tenets of the PPP

(a) Real poverty alleviation can only be achieved through economic development and productive investments.
(b) Given the irreversible process of the globalization of the world economy, the region can only develop by positioning itself globally and attracting the attention of multilateral organisations, the developed countries and private investors.
(c) It is indispensable to build basic infrastructure in sectors such as education and training, transport, telecommunications and overland communications.

Source: Olvera, 2002; CIEPAC, 2005

6.3 Specific Objectives and Organisation of the PPP

Building on the central ideas behind the PPP (see table 6.1), according to the Mexican Secretaria de Relaciones Exteriores the basic goals of the Plan include:

1) Social and human development;
2) Civil society participation in development;
3) Structural change in the economies of the region;
4) Capitalisation on the regions comparative advantages124;
5) Creation of incentives for productive investments; sustainable management of natural resources;
6) Coordinated plans and strategies in agreements with Central America;
7) Modernisation and strengthening of institutions of the region (Secretaria de Relaciones Exteriores, ND).

In order to achieve these goals, as explained previously, the Plan has been divided into eight separate initiatives known as the Mesoamerican initiatives, which together contain 29 individual projects. These initiatives and their respective objectives are detailed in table 6.2 (see also figure 6.1). According to Ramirez (2003; 14), the PPP initiatives “intend to promote the development of the Mesoamerican region by opening a new step in dialogue and joint work to overcome the poverty conditions and to elevate the socio-economical well-being of the Mesoamerican peoples”. Each Presidential Commissioner from the countries involved in the PPP has responsibility for one of the eight initiatives.

124 The comparative advantage theory, coined by the British economist David Ricardo in 1821, suggests that the gains from trade follow from allowing an economy to specialise and therefore become more efficient (WTO, ND; New Internationalist, 2004).
The Executive Commission to which each of the Presidential Commissioners belongs is coordinated by the presidency of the SICA and the Mexican Commission. Different sub-commissions execute the work and projects of the Plan. In order to define the initiatives and choose the projects for the PPP, the commissioners have been guided by the following criteria:

1. The initiatives and projects should cover all the countries of the region and should contribute in a concrete way to Mesoamerican integration.
2. The projects and actions should ensure sustainability of natural resources and contribute to reduce the region’s vulnerability to natural disasters.
3. The projects and actions should be discussed through wide society participation and should respect the cultural diversity of the region.
4. The initiatives, projects and actions should be designed with the objective of stimulating private sector participation.
5. The projects and actions included in the Plan should be consistent with the fiscal and budget restrictions of the region (IADB, 2003a).
Table 6.2 - Initiatives of the PPP

1. **Sustainable Development (IMDS) - Nicaragua**
   - To establish sustainable conditions in the Mesoamerican region, sustainable management under a comprehensive framework encouraging the cultural preservation and rational use of natural resources with the ultimate goal of maximising its ecological, cultural and economic value.
   - Projects include the Mesoamerican Biological Corridor, the Mesoamerican Program for Environmental Management Systems (PROSIGA), and the agricultural and rural development program (DAR).
   - The cost of this initiative, according to the IADB (2003a) has been set at US $84.7 million.

2. **Human Development - Mexico**
   - To reduce poverty, facilitate access of vulnerable population groups to basic social services, and contribute to the fullest possible development of Mesoamerican peoples.
   - Projects include a regional health program, educational projects promotion and accreditation, work training and the creation of a migrations statistical information system.
   - The cost of this initiative, according to the IADB (2003a) has been set at US $37.7 million.

3. **Prevention and Mitigation of Natural Disasters - Panama**
   - To promote the prevention and mitigation of natural disasters and include a consideration of risk management in projects implemented in all sectors.
   - Projects include the collection and dissemination of climate and hydro-meteorological data for public- and private-sector decision-making in order to save lives, reduce the negative impact of natural disasters and contribute directly to the competitiveness of the region and the raising of public awareness of the importance of risk management and disaster reduction, encouraging discussions at the national and regional level to promote prevention, mitigation, and vulnerability reduction, as well as their integration into local culture.
   - The cost of this initiative, according to the IADB (2003a) has been set at US $4.3 million.

4. **Tourism Initiative - Belize**
   - To promote eco-tourism with the inclusion and participation of the region's native people respecting their diversity, culture, traditions whilst preserving natural resources.
   - Projects include the development of integral tourists circuits in the Mesoamerican region, the reinforcement of airport security, certification of sustainability for tourist projects.
   - The cost of this initiative, according to the IADB (2003a) has been set at US $177.7 million.

5. **Facilitation of Trade - Honduras**
   - Promote trade in the region through reduction of transaction cost in trade between countries, and promote the participation of small and medium-sized enterprises in regional exports.
   - Projects include customs and border pass modernisation, the promotion of medium and small size enterprises in export orientated activities and a technical operation program in the financial sector.
   - The cost of this initiative, according to the IADB (2003a) has been set at US $212.3 million.
6. **International Mesoamerican Road Network (RICAM) - Costa Rica**

- Promote the physical integration of the region with a view towards facilitating the passage of people and goods and, in so doing, reduce transportation costs. The initiative also covers marine and aerial transportation aspects.
- Projects include the construction of a 3159 km North-South Pacific Coast highway which will run through all 8 countries and the construction of a 1746 km Atlantic Corridor highway that will run through some of the countries on the Atlantic Coast. In addition 4130 km of regional connection roads will complement both the Atlantic and Pacific corridors. Five dry canal projects have also been proposed that will run from east to west to connect ports on both coasts.
- The cost of this initiative, according to the IADB (2003a) has been set at US $4.3 billion.

7. **Energy Interconnection - Guatemala**

- Unify and interconnect electricity markets with a view toward promoting an increase in investments in the sector and a reduction in electricity costs.
- Projects include the Electrical Interconnection System for Central America Project (SIEPAC), considered to be the cornerstone of this particular initiative, whose objective is to link up the electricity grids of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. The improvement of electricity services in rural areas is also on the agenda.
- The cost of this initiative, according to the IADB (2003a) has been set at US $4 billion.

8. **Integrating telecommunication services - El Salvador**

- Develop the infrastructure for informatics interconnectivity in the region.
- Projects include the integration of a communication and technologies network, the establishment of a Mesoamerican information highway (MIH), the use of information and communication technologies.
- The cost of this initiative, according to the IADB (2003a) has been set at US $61 million.

Sources: Rodriguez (2002); Presidencia de la Republica, Nicaragua (NDa); IADB (2003a); Secretaria de Relaciones Exteriores (ND); Musfeldt (2003); CABEI-IADB-ECLAC (2001).
Figure 6.1 – PPP Projects in the Central American Region

6.4 Funding of the PPP

As the PPP portfolio is made up of many actually existing projects as well as projects that have not yet been defined, it is difficult to make an accurate estimation of the total projected costs. However estimations that have been specified over the 25-year time period of implementation for the total costs of all initiatives range from US$ 10 billion to US$ 20 billion (Pickard, 2002a; Treat, 2002, Cali, 2002a). Financial sources for the projects come from the participant countries, investments from the private sector, donations of bilateral corporation agencies and loans from multilateral financial institutions such as the Inter-American Development Bank (IADB) (Ramirez, 2003). The Washington DC-based IADB is one of the main influential forces125 and the key coordinator for investment behind the PPP, administering the Mexico Fiduciary Fund, which finances the PPP infrastructure projects. The governments of Mexico, Belize, Guatemala, El Salvador, Nicaragua, Costa Rica and Panama are using taxpayer funds to contribute towards the financing of 'high impact' investments (Warpehoski, 2004a). For example, US$1.5 billion is expected to come from national budgets to finance the US $4.3 billion RICAM (International Mesoamerican Road Network) initiative (see section 6.5.1). Other principal lenders for the PPP are members of the Inter-Institutional Technical Group (GTI) (section 6.2), whilst other participating organisations include the Latin American Association of Integrations (ALADI), Central American Environment and Development Commission (CCAD), Coordination Centre for the Prevention of Natural Disasters in Central America (CEPREDENAC), Central American Indigenous Agroforestry (ACICAFOC) (the organisation involved with incorporating a social component into the MBC - see chapter 5 section 5.3.2), and the Fund for Development of Indigenous Peoples (FONDIN). Other financial investors and donors include the World Bank, the Japanese Bank for International Cooperation, the European Union, the Spanish government and other bilateral agencies (Cappi, 2003; Pickard, 2002b; Warpehoski, 2004a). The

125 The Bank is also the main force behind the PPP's counterpart the South American Integration Infrastructure Initiative (IRSA). IRSA proposes a series of large-scale, explicitly high-risk (and debt-heavy) mega-projects in South America that would result in extensive alterations to landscapes and livelihoods in the region (Gimenez & Spang, 2005). For more information visit www.iirsa.org.
projects receive firm financial commitment from lenders only when they have been defined and approved for execution by the PPP Executive Commission (Ramirez, 2003). Aside from public sector and IFI funding, since 2001 more than 300 private investors have also expressed an interest in the PPP, these include:

- US-based companies such as Harken Energy Corporation, Applied Energy Services (AES), Duke Energy and Harza who are investing in the development of hydroelectric dams from Mexico to Panama and the privatisation of the energy grid.
- US-based International Paper Company and Boise Cascade, who are intending to purchase forested lands in Mexico for plantation forestry (International Paper is also investing in research for genetically engineered trees).
- Grupo Pulsar, a Mexican biotechnology cooperation, which is investing in Chiapas in plantation forestry, biotechnology and research on genetically engineered trees.
- ENDESA, a Spanish corporation which is the principal investor in the regional energy interconnection initiative to privatise energy and develop electric dams.
- DELASA, a US based investment group that has a 25-year lease on the privatisation, port modernisation and creation of mega-projects (including factory zones and road expansion) in the port town of Bilwi-Puerto Cabezas, Nicaragua.
- The fifth Centennial development Fund of Spain that is supporting, in particular, the development of the electrical system (SIEPAC) (Musfeltld, 2003; Warpehoski, 2004a).

6.5 The PPP: Another Neoliberal Strategy? General Impacts and Criticisms.

In order to contextualise the relationship between the MBC and the PPP, it is first of all important to consider how the latter has been received in the region by exploring the academic and political debates which have evolved since it was first proposed. As seen in the previous section, promoters of the PPP assert that its main objectives are to improve the economies of the eight countries it transects as well as the lives of the 65 million inhabitants within the PPP area (Pickard, 2004; Luna, 2002). Despite the social and environmental objectives outlined by those promoting the PPP, it is in essence a traditional developmentalist project designed to expand economic activity through opening up new areas of economic activity and intensifying resource use. As such, it has generated a fair amount of opposition from those with different
priorities and emphases. While section 6.6 will analyse in more detail the sustainable development credentials of the PPP (through an exploration of the IMDS) and its relationship with the MBC, this section aims to explore the environmental and social impacts of the other more infrastructural initiatives of the PPP.

Being the narrowest stretch of the Americas and situated between the world’s fastest growing production sites in Eastern Asia and the largest consumer markets in the United States and Western Europe, Mesoamerica, geopolitically, has become a central point of focus for global trade (see later debates about the Dominican Republic - Central American Free Trade Agreement). This has meant that, the region’s strategic positioning along with its wealth of natural and human resources has led corporations to take a fresh look at the region. Moreover, the prevailing neoliberal model, which has been in place in the region since the beginning of the 1990s (see chapter 3 section 3.2.2), has been specifically designed to provide a beneficial economic climate in which MNCs (Multi National Corporations) are able to prosper. Indeed, according to (Pickard, 2002a) it is;

"these corporate interests, along with the region’s neoliberal governments at their beck and call [offering corporations free land on which to build factories, free utilities and tax holidays, government-financed training of the workforce etc] and the backing of multilateral banks, that have brought the PPP into fruition".

The major corporate beneficiaries, due to Central America’s geographical positioning, have been mainly from the US and to a lesser extent South-East Asian corporations which have also made investments within the Central American region.

Although, as explained in section 6.2, ideas of a regional development agenda and the integration of regional projects had started to be discussed amongst Central American governments in the mid-1990s, the actual PPP itself was not made public until 2001. According to Luna (2002) the reason why it took many years for the PPP to be made public was because “the appropriate political
conditions were not in place to overcome the predictable rejection from public opinion". Indeed, although Fox may have proposed the original idea of a regional development initiative to his neighbouring Central American governments, critics argue that this proposal provided an opportunity for other influential players such as the IADB to utilise the 'entrepreneurial' and favourable media image of the newly elected Vicente Fox (he was elected in July 2000) to enable the Plan to be pushed from the outside with minimum resistance (Luna, 2002; NoIDB, 2006). Although this argument suggests that Fox is essentially just being used as a figurehead by more powerful outside players to promote the Plan, the fact that the PPP merely builds on a series of regional projects, which have emerged from the region's elite and a neoliberally-orientated government (Mexico), would indicate that perhaps the Plan is not as externally imposed as some would think. Whilst players such as the IADB and the World Bank are indeed promoting the Plan, they are not necessarily the real force behind it, but more an influential collaborating party. Encouraged by the IADB and the World Bank, therefore, the Fox administration, proposed the PPP as a mechanism for tackling poverty in a 'comprehensive way'. From their neoliberal perspective, it is believed that poverty can be tackled, but not necessarily resolved, (which would entail looking at why people are poor in the first place) by the jobs that will supposedly be generated by MNCs that decide to invest in the PPP zone (Pickard, 2002b). However, the notion that large-scale investment in infrastructure projects will automatically lead to the alleviation of poverty and social injustices has been strongly attacked, both in this and other schemes (Masika and Baden, 1997; BIC, 2004b).

During 2001, the year the PPP was launched, considerable grassroots opposition arose condemning it as being too "elitist in its origin, undemocratic in its implementation, promoter of corporate interests, and exclusive of social concerns", which subsequently forced the Fox government to backtrack (Pickard, 2004). This resistance, along with the inability of the Mexican

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126 Fox set priorities early on in his administration when he stated that "my government is by entrepreneurs, for entrepreneurs" (Pickard, 2002a).
government to obtain enough funds for the implementation of all the PPP projects had a 'backlash' effect on the Plan, causing its progress to slow between June 2002 and November 2003. One of the major criticisms of the PPP was its “perceived focus on infrastructure mega-projects and the relative neglect of the social, environmental and cultural impact of these initiatives” (McElhinny and Gross, 2003; 1). As a result, the IADB and the participating governments began to change their approach and repackaged the PPP giving it more of a socially and environmentally friendly image in the hope that the new image of the PPP would not only appease the growing opposition but also, and maybe more importantly, capture more funds for project implementation. Re-emerging in late 2003, this repackaging aimed at strongly re-orientating the PPP, at least superficially, towards shifting the balance between sustaining and developing the region's resources. This involved placing more emphasis on the apparent 'environmental face of the PPP'. The keystone of this rebranding was the establishment of the Mesoamerican Initiative for Sustainable Development (IMDS) — a proposal for environmental management and the promotion of natural resources management for the PPP (the IMDS, which provides the link between the PPP and the MBC will be explored in more detail in section 6.6.1).

However, despite this shift in emphasis within the PPP initiative, critics argue that essentially, what lies behind the Plan's new environmental face and its humanitarian claims of improving the lives of the region's inhabitants are powerful business interests (Warpehoski, 2004a). Indeed the Plan primarily expresses the interests of neoliberal governments that are keen on exploiting the abundant, cheap labour force and natural resources in order to attract foreign investment by promoting the profitability of export-oriented neoliberal development and the shifting from locally to corporate owned forms of agriculture, forestry and industry (Cappi, 2003; O'Neill, 2004). It would therefore seem that the PPP and its subsidiary projects have been designed in collaboration with and for big businesses, and not for the 65 million people who live in the PPP area, the majority of whom are living in poverty (75% living on less than US$2 a day) (Pickard, 2002b). Even the initiatives that are less focused on infrastructure, seem to be geared towards corporate interests. The Trade
Facilitation initiative, for example, prioritises the elimination of tariffs to ease the access of MNCs into the region, the Natural Disaster and Mitigation is focusing on developing the insurance market (Call, 2003a).

Although PPP promoters claim that this neoliberally-orientated development strategy will solve Central America’s social and economic problems e.g. by creating more jobs etc, a successful PPP may actually threaten many of the local communities and indigenous peoples in affected locations within the region. Not only will they suffer the social and environmental impacts of the mega projects that comprise the PPP (such as dislocation, violation of land rights, destruction of communities local natural resources) but also, whilst MNCs continue to boost their investments, it is the people of the host countries who, through their taxes, are providing a large proportion of the funds that will be needed to finance these projects. In an interview for this research in 2005, a representative from CABLEI127 (the Central American Bank for Economic Integration), one of the key players behind the PPP, asserted that “the PPP projects will benefit the people and so they have to pay through their taxes”. However, if a $20 billion infrastructure project had been designed to benefit the majority of the region’s people it would look very different to that which has been proposed. For example, rather than pumping funds into the construction of toll highways and hydroelectric dams, more money could have been channelled into building schools, rural clinics and small roads to help move agricultural products out of peasant zones (Pickard, 2004). Although some private investment in infrastructure is likely, most of the money needed to fund the PPP will come direct from government payments, or from loans granted by the IADB, adding to the region’s mounting debt burdens (see section 6.4) (Pickard, 2002a; Cappi, 2003). Therefore as Pickard (2002a) suggests;

“rather than an altruistic design to bring the region into ‘the 21st century’ as Fox maintains, it is multinational corporations’ changing perception of the profitability of the areas natural resources base that has fuelled the PPP”.

127 Roy Barboza, representative CABLEI (BCIE)- interview held in Costa Rica on 13th January 2005.
Thus, it seems that behind its façade full of demagogy and good desires and whilst promoters of the Plan believe that opening up the region to the global market will combat the region’s poverty, the PPP is merely preparing the necessary conditions for the transnational exploitation of strategic resources whilst ensuring an abundant cheap work force for serving global capital (Luna, 2002). In this way the PPP can be located squarely within the centre of the dominant neoliberal discourse which, according from the business perspective, emphasizes the positive aspects of globalization, encourages the opening up of markets and transnational investment and sees the role of the state as little more than the facilitation of the best possible conditions for business.

6.5.1 The Environmental and Social Costs of Infrastructure

The PPP’s main components are its transport system (RICAM) initiatives and its energy interconnection initiative (see table 6.2). With the Panama Canal saturated by traffic and too small to handle large oil tankers, the PPP region has long attracted attention as a potential site for further shortcuts for east-west trade. As free trade and corporate globalization extend their reach, the rapid transportation of goods is becoming an increasingly important issue (Warepehoski, 2004a). Multilateral Developments Banks, therefore, identified that high transport costs would be one of the central constraints to regional competitiveness under an eventual DR-CAFTA or FTAA (section 6.7) and so emphasis has been placed on the transport system (RICAM) which is now one of the most advanced and rapidly proceeding PPP initiatives (McElhinny, 2004a). This infrastructural improvement is intended by the governments involved, corporate investors and IFIs who are implementing the Plan, to make the region more competitive in order to attract what these players believe “as crucial foreign investment” (Rodriguez, 2004a; 16). RICAM and the Energy Interconnection initiative have together received over 85% of the PPP

128 With the 6% and 8% annual increase in container trade between Asia, North America and Europe since 1990, the Panama Canal has been increasingly unable to meet the growing quantity of inter-oceanic trade (Nicanet, NDa). However, in July 2006, a recent announcement was made by the Panamanian congress for the widening of the Panama Canal, which although has not been officially tied to the PPP, is still being backed by the US and the same institutions who are behind the PPP (Wolf, 2006).
investment whilst less than 3% has been targeted towards human development such as health care, sustainable development and the prevention and mitigation of disasters (O’Neill, 2002b). The Mexican government’s budget, for example, for 2002 for the PPP was $743 million and more than 80% of this total was devoted to highway, port, and other infrastructure development (Call, 2002b).

The main PPP transport goal for the RICAM initiative is to upgrade, expand, harmonise and then privatise (through concessions) a substantial transportation grid totalling an approximate 9000 kilometres with the intention of making the transfer of merchandise in the region less complicated and facilitate commercial trade (IADB, 2003a; McElhinny, 2004a; Rodriguez, 2004a). As shown in table 6.2, this transportation grid consists of a Pacific Corridor Road Integration project, stretching from the city of Hidalgo in Mexico to Panama City, which will incorporate various feeder roads and will connect to a parallel Atlantic Corridor Road Integration Project stretching from Villahermosa in Mexico to the Salvadoran port of Cutuco (Rodriguez, 2004a; Rodriguez, 2004b). These new highways will be large scale, multi-lane constructions that are not designed to help connect local communities to local markets but are instead designed for international commerce often coming with high tolls that will make them inaccessible to local users (Call, 2003; Call, 2002a). The planned highway investments in Mexico and Central America are estimated to cost US $ 4.3 billion and approximately US$1.5 billion is expected to come from national government budgets. Interestingly, though, 50% of the total cost is unaccounted for and only 18% of the total cost has so far been committed by multilateral or bilateral finance - a remarkably small percentage from players who will be some of the main beneficiaries (CABEI - 10%, IADB, 6% and bilateral agencies - 2 %) (McElhinny, 2004b). Essentially, these transportation corridors are orientated to service external markets with the primary beneficiaries being multinational corporations and domestically owned export companies that will see their transportation costs reduced. Therefore, the purpose of these infrastructure improvements according to Rodriguez (2004a; 14)
"is not the integration of Central American regional markets, which would strengthen regional development, but to guarantee the traffic of merchandise through the region, taking advantage of the region’s resources and strategic location and ignoring those areas reliant on subsistence agriculture production where the greatest poverty exists”.

This assertion about the focus of the PPP is also supported by those promoting the project themselves, as Roy Barboza\textsuperscript{129}, a representative from BCIE (CABEI) emphasised in an interview in January 2005 “first the roads then the people and afterwards we can concentrate on human and sustainable development”.

As part of the RICAM initiative, the PPP, in order to facilitate trade amongst Europe, the USA and the Pacific Rim countries and relieve traffic from the Panama Canal, has proposed a series of ‘dry canals’; highways and freight railroads connecting ports and development zones on both sides of the isthmus, which could threaten to displace rural indigenous peoples and destroy ecosystems in the region (O’Neill, 2002). At least five such dry canals are intended for Mesoamerica, in particular for Mexico’s Isthmus of Tehuantepec, Honduras and El Salvador and as many as three proposals are being considered in Nicaragua (Petermann, 2000; Warpehoski, 2004b). With recent proposals for a Nicaraguan wet canal being rejected as too costly and environmentally damaging, dry canals, being slightly less controversial as well as more feasible, seem to be gaining more support from the Nicaraguan government (Costantini, 2006; Nicanet, NDa). Already feasibility studies have commenced (summer 2006) for dry canal proposals for the Southern Autonomous Regions of Nicaragua (RAAS) that have been put forward by the US corporations Interoceanic Canal Of Nicaragua (CINN) and Global Intermodal Transport System (SIT-Global) (Costantini, 2006; Warpehoski, 2004b). Scheduled to break ground next year, these proposals include a 500 foot-wide rail corridor that, if constructed, would have substantial environmental implications such as increased deforestation and biodiversity destruction\textsuperscript{130}, the interruption of

\textsuperscript{129} Roy Barboza, Representative BCIE (CABEI) – Interview held in Costa Rica on 13\textsuperscript{th} January, 2005

\textsuperscript{130} These proposals would strike a severe blow against efforts to protect the Nicaraguan Atlantic section of the MBC (Nicanet, NDa) (see section 6.5). How can the Nicaraguan government accept millions of dollars in funding for a nature conservation project on one hand, while on the other hand it is promoting a mega development scheme that will destroy the very same forests? (Centro Humboldt, 2001).
important migratory routes to animals such as the puma etc and the pollution of coastal waters and marine habitats with the potential increase in ship traffic and potential tanker oil spills. Indeed, the construction of these rail lines would also take their toll socially especially by disrupting the lives of Nicaragua’s indigenous and Afro-Nicaraguan communities, who could suffer the impacts of increased and uncontrolled colonisation of displaced families and the violation of indigenous rights (Warpehoski, 2004b; Centro Humboldt, 2001).

Under Nicaragua’s Constitution and Autonomy Law, the traditional lands of the indigenous communities of eastern Nicaragua are protected communal lands that cannot be bought or sold (Warpehoski, 2004b). Despite these clauses, the nation’s government has refused to grant legal titles to many indigenous communities, including the Rama³¹, treating the land as ‘national land’ (Centro Humboldt, 2001). Consequently canal investors willing to flaunt the Constitution and the rights of the local peoples, by buying their lands and making their mega-project a reality would disrupt or indeed destroy traditional subsistence activities of fishing, hunting and cultivating crops. The investors are claiming that new jobs would offset the environmental destruction and the violation of land rights (Centro Humboldt, 2000; Warpehoski, 2004b; Call 2002c), however, according to Warpehoski (2004b; 33) “most of these would be temporary construction jobs that will disappear after the ecosystems and communities are destroyed“. Whilst these dry canals may create a shortcut between the seas for the global shipping industry, in reality they merely provide the physical infrastructure to facilitate increased free international trade which further consolidates the neoliberal economic model (Nicanet, NDa).

The other initiative where PPP promoters are choosing to channel funds is the energy interconnection initiative, of which SIEPAC (Electrical Integration System for Central America) is the cornerstone. SIEPAC seeks to improve the region’s power infrastructure by constructing 1830 kilometres of 230 kV energy distribution lines to distribute power, generated by gas or dams, from Mexico

³¹ Rather than being approached and consulted with by the companies behind the dry canals or indeed by the Nicaraguan government, the Rama learnt about these proposals via radio and newspapers (Nicanet, NDb).
to Panama (McElhinny, 2004b; Call, 2002). The total cost of the SIEPAC project is US$ 320 million, which excludes investments in the Mexican grid. However, the project also includes a US$ 40 million, 88km 400kV interconnection between Guatemala and Mexico, and a US$ 30 million, 195 km 230 kV interconnection between Guatemala and Belize. As part of an expansion of the PPP to Colombia\textsuperscript{132}, an US$ 200 million interconnection between Panama and Colombia is also under review (McElhinny, 2004b). With the privatisation of the electrical industry, it is hoped that a competitive regional energy market will be created that will reduce the cost of energy and expand energy capacity (McElhinny, 2004b; Luna, 2002).

Through the SIEPAC project, PPP promoters intend to interconnect and make compatible the electrical grids of Central America and Mexico. However critics fear that essentially this interconnection will then “link the region’s considerable hydroelectric generating capacity to the electrical grid of the United States” (Pickard, 2002a). According to the IADB, only 8% of Central America’s hydroelectric potential is being tapped. In order to feed industrial development under the PPP, therefore, governments and multilateral development banks are planning the construction of many dams; already a total of 25 dams have been planned for the region under the PPP, 18 in the Mexican state of Chiapas alone (Pickard, 2002a). Although once built, hydroelectric dams provide a cleaner energy than the burning of fossil fuels, their construction process often results in the flooding of thousands of acres of inhabited land and the destruction of archaeological sites and so harbours the greatest threat for indigenous and campesino communities, displacing them from traditional and customary land (Aguirre, 2004; Pickard, 2002a; Cappi, 2003). The communities who stand to be affected by the construction of these dams have largely been excluded from decision-making processes, contradicting agreements made between indigenous peoples and the State such as the San Andres Accords in

\textsuperscript{132} In 2005, the Colombian President Alvaro Uribe expressed his intentions of integrating Colombia into the PPP (Martinelli, 2005. According to Ortiz (2006), since July 2006, Colombia has been officially become apart of the PPP, although it is still unsure the role that Colombia will play in the PPP implementation.
Mexico\textsuperscript{133} (Pickard, 2002b; Aguirre, 2004; Bejar, 2001). An example is the Boca del Cerro Hydroelectric project, a joint project between Mexico and Guatemala on the Usumacinta River, where it is feared that the dam project (one of the 4 proposed on that river by the PPP) could flood as much as one third of the El Peten area of Guatemala, harming areas of biodiversity and destroying archaeological sites (Aguirre, 2004). Having received much local opposition, the Guatemalan government withdrew its agreement to participate resulting in the dam, as it stands in its original proposal, not being constructed. However, the Mexican government are still keen to build a much smaller dam on its own, but as Guatemalan officials have yet to see any official plan for the project, Mexico cannot legally construct the dam without Guatemala’s approval\textsuperscript{134} (Bach \textit{et al.}, 2005).

Mexico has also expressed an interest in plans by the Nicaraguan government to include a hydroelectric dam project in their section of the PPP in Jinotega because, according to Gioconda Castillo\textsuperscript{135} from the PPP Commission in Nicaragua “they [the Mexicans] will have a lack of energy by 2015, so we will be able to sell energy to Mexico and help Nicaragua’s economy”. However, there does appear to be a good deal of confusion about the actual state of these plans regarding dam construction, even amongst those most closely involved in the PPP. Officials at the IADB, for example, assert that they are not funding dam construction through the PPP. Marcelo Valensuela\textsuperscript{136}, a senior SIEPAC coordinator for the IADB, made this clear in an interview with the author in 2005 when he stated that “dams have nothing to do with the PPP. In Costa Rica, for example, dams are projects of the Instituto Costarricense de Electricidad” (a public entity in control of Costa Rica’s electricity and telecommunications). However, according to Aguirre (2004; 24) “the Bank does finance ‘regional

\footnotesize{\textsuperscript{133} The San Andres Accords were signed between the EZLN (Ejército Zapatista de Liberación Nacional) and the federal governments of Mexico in 1996 and states that “the new relationship between the indigenous peoples and the Mexican State should guarantee inclusion, permanent dialogue and consensus on development in all aspects. The politics of the State will not be decided unilaterally, nor by underestimating the capacity of indigenous peoples to construct their own future.” (Soto, 2002a)

\textsuperscript{134} According to an 1961 agreement, both Guatemala and Mexico must approve projects which are situated on bi-national waters (Bach \textit{et al.}, 2005).

\textsuperscript{135} Gioconda Castillo, Assistant to PPP Commissioner Nicaragua – Interview held in Nicaragua on 19\textsuperscript{th} May 2005.

\textsuperscript{136} Marcelo Valensuela, SIEPAC coordinator, PPP – Interview held in Costa Rica on 17\textsuperscript{th} January 2005.}
energy integration’ which provides loans for PPP infrastructure freeing up government monies for ‘secondary’ projects like dams’; a tactic that diverts public and media attention from these rather more controversial PPP projects.

Another secondary project of the PPP or sub-plan, which falls into the PPPs Energy Connection Initiative and one which could have grave environmental as well as social implications, is the ‘Energy Plan of the Americas’. Having been signed for the moment by the governments of Canada, USA and Mexico, this plan proposes to create a common, deregulated fossil fuel market for the region, which could lead to an increase in oil exploration, especially by MNCs. There has also been a proposal for a potential construction of an oil pipeline from Panama to the south of Veracruz, Mexico, then north towards Texas. If this particular sub-plan of the PPP goes ahead, not only would irreversible environmental damage be caused but also local communities would be moved from land above oil reserves causing social dislocation (Luna, 2002; Hamilton, 2006).

SIEPAC is one of the more high profile mega-projects of the PPP, and it is also, according to Marcelo Valensuela, “one of the most advanced projects out of all the eight initiatives” in terms of its institutional design and the allocation of funding (McElhinny, 2004b). The initiative is made up of two supranational institutions, a Regional Regulatory Commission over Electrical Interconnection and a Regional Operations Entity, both of which have greater authority and exercise greater influence over key energy decisions than do the national governments. The Entidad Propietaria de la Red/Linea (EPR/EPL), a consortium of mixed public and private capital, owns the transmission line and includes as members the region’s electric power companies - CEL of El Salvador, ENEE of Honduras, INDE of Guatemala, ENTESA of Panama, Grupo de ICE of Costa Rica and ENEL of Nicaragua. The EPR is the official borrower of the loans to finance SIEPAC and establishes the fee for using the emissions line. The Spanish transnational energy company, ENDESA, is also another major shareholder and beneficiary of SIEPAC. Indeed, ENDESA ranks as the 22nd largest firm globally in its sector with a total worth of some US$16 billion
and controls 10% of Latin America’s electrical generation capacity, so consequently is able to have a substantial influence on any decisions made in the region (McElhinny, 2004b). A prime example of privatisation and deregulation, SIEPAC is a project that merely responds to the needs of big corporations, not residential users (Call, 2003b; McElhinny, 2004b). The situation has not, and likely will not, become any more favourable for Central Americans, as 50% of state electricity generation capacity has been transferred to foreign transnationals since 1995 (McElhinny, 2004b). Consequently, not only is the SIEPAC mega-project adding millions of dollars to the public debt of each Central American nation but it also may not even guarantee that the power it transmits will be affordable to Central Americans (Call, 2003b). The official priorities are clear, however, as seen from the comments of one senior official in the Salvadoran government who recently stated that “if the initiatives on highway integration, electric power and telecommunications integration are carried out, the Plan Puebla Panama would have been a success” (Olvera, 2002; 4).

The strategic positioning of Central America and Southern Mexico and its practically non-existent labour and environmental regulations are the driving forces behind another sub-plan of the PPP ‘The March towards the South’ which is being coordinated by the Mexican government (Luna, 2002). Instigated in 2001, this project, in coordination with participating state governments and in partnership with U.S. and Mexican companies, “identifies and promotes investment projects that contribute to the growth and development of the southern regions of Mexico, creating new job opportunities137” (Secretaria de La Economía, México, 2002). More specifically, the project aims at giving economic support for both job training as well as for the improvement, remodeling, and equipping of industrial work areas (Secretaria de La Economía, México, 2002). Promoters of this particular project therefore believe that, by providing more regionally based jobs, not only will the project contribute to the stemming of social unrest within the region but it will also lead to an improvement in

137 During 2002, 68 projects were identified which generated almost 48,000 jobs within Mexico (Secretaria de La Economía, México, 2002).
inhabitants’ quality of life (Pickard, 2002b; Soto, 2002b; Hamilton, 2006). Critics, however, are dubious about the project, arguing that what it actually intends to do is to create all the necessary conditions (labour and infrastructure) to install and expand corridors for the transnational maquiladora\textsuperscript{138} industry in south-southeast Mexico as well as the Central America region (Luna, 2002; Warpehoski, 2004a; La Coordinadora Regional de Los Altos de Chiapas, 2004). According to Hamilton (2006);

"the real aim of maquiladora zones is not to provide employment to marginalized groups, but to capitalize on the marginalization and displacement inherent in DR-CAFTA".

Civil society organisations such as La Coordinadora Regional de los Altos de Chiapas, based in Mexico, therefore believe that The March Towards the South project can be viewed as a “wholesale exploitation of the local inhabitants and a profoundly anti-democratic assault on the sovereignty of all the affected countries” (La Coordinadora Regional de los Altos de Chiapas, 2004: 19).

However, the intention of the Mexican government is that through increased job creation such as within the maquila industry along with increased militarisation at borders, The March towards the South project, in association with the Plan South project, can help resolve the problem of the migration of undocumented workers from Mexico and Central America to the US (Palacios, 2001). The ‘Plan South’ project, having already been signed by the governments of the US, Canada and Mexico in July 2001, intends to reduce illegal immigration from Central American countries to their northern developed neighbours, by increasing militarisation on Mexico’s border and by US and Canadian governments providing human quotas to Mexico for legal temporary workers for agriculture and industry in the North (Luna, 2002; Palacios, 2001). For example, under Plan South, Mexico would double its deportation of Central Americans (Xelaju, 2001). According to Flynn (2002), however, many observers have claimed that Plan South has “contravened international law and bilateral

\textsuperscript{138} Maquiladoras (or maquilas) are garment and electronic assembly factories that bring in parts from other countries and use cheap labour to make finished products.
accords between the Meso-American countries, and resulted in some high
profile human rights cases” such as illegal detainment.

Although, the Mexican government are promoting the creation of jobs via its
March towards the South project, many of the jobs will be within the
maquiladora industry, which is notorious for appalling labour conditions such
as poor ventilation, sexual harassment, verbal abuse and highly toxic emissions.
Maceoin (1999) discusses how few of the maquila workers can actually survive
these unhealthy working conditions found within the factories for more than
six or seven years. To make the situation worse, the health and safety
requirements, labour rights, such as the freedom of workers to organise, are
laxly enforced on the maquiladoras and sometimes not at all. This is as a result
of there being loopholes in international trade law and unilateral corporate
agreements that exempt transnationals from national labour and environmental
laws (Warpehoski, 2004a; Cappi, 2003). Although, labour conditions are hoped
to be improved under the recently negotiated Dominican Republic - Central
American Free Trade Agreement (DR-CAFTA – see section 6.7), Brown and
Cortes-Ramos (unpublished; 33) argue that;

“despite government commitments to improving working conditions over
recent years pernicious exploitation of labour under atrocious conditions has
continued to be rife in Central America, and, if anything, has worsened as
the maquila boom has continued”.

Maquiladoras also do not use locally made goods as inputs or indeed transfer
technology to the host country. They merely de-link production from the host
country’s needs, responding solely to the needs of the MNCs that set them up
generating increased dependency on northern economies (Pickard, 2002 b;
Cappi, 2003; Red Mexicana de Acción Frente al Libre Comercio y Instituto
Maya, 2001). Not only are these assembly factories hoped to absorb part of the
rural labour displaced by PPP mega-projects, they are also being flaunted by
PPP promoters;

“as alternatives for peasants forced from their land by ‘free-trade’ policies
that permit the dumping of heavily subsidised corn, beans and other basic
foods from the US and Central American markets” (Pickard, 2002a).
Section 6.7 explores the impact of the impacts of free trade agreements, specifically the DR-CAFTA.

Although maquiladoras have provided many jobs throughout the region, especially on Mexico’s northern border, the workers not only receive low wages but also, with the growing number of people seeking employment at the maquiladoras as a result of displacement, the increased competition can reduce salaries even further (La Coordinadora Regional de Los Altos de Chiapas, 2004). For example, in Central America, according to Maceoin (1999);

"the minimum wage amounts to less than half the ‘canasta basica’; the income needed to feed a family of four which does not include rent, utilities, clothing, health or recreation".

Leaving aside the direct provision of wages (however low these may be), the factories offer virtually no benefits for the rest of each national economy (Pickard, 2002b). Furthermore, maquiladoras can easily move operations (depending on the type of industry) to locations that offer more attractive incentives, where, for example, local governments subsidise MNCs by lifting tax and duty requirements (La Coordinadora Regional de los Altos de Chiapas, 2004). It seems therefore, that corporate-centred neoliberal development, with a lack of environmental and labour regulations coupled with low wages, not only allows MNCs to disproportionately reap the benefits but it also induces social decay as the fabric of communities is dismantled and men and women leave their families behind in search of maquila work (Cappi, 2003; Luna, 2002).

The lack of consultation with local populations or provision of opportunities for meaningful dialogue about development projects has been one of the main criticisms of the PPP (Bejar, 2001, Pickard, 2004). In fact, this should not be too much of a surprise given that the main coordinating body behind the PPP, the IADB, has a long-established reputation for executing projects "that disregard indigenous peoples’ customary rights to their lands, territories, and natural resources" (BIC, 2005). Throughout both South and Central America, indigenous people argue that the IADB has financially backed projects that
have not only had severe impacts on surrounding ecosystems upon which local indigenous communities depend, but in many cases have violated indigenous peoples’ land rights, impacted on their culture and caused severe health implications (BIC, 2005). Examples include, the Camisea Natural Gas Project in Peru, the Chixoy hydro-electric in Baja Verapaz, Guatemala, the Yacyreta hydro-electric dam between Paraguay and Argentina and the Brazil-Bolivia gas pipeline (BIC, 2005; NoIDB, 2006; FOEI, 2005). As far as the PPP projects are concerned, however, the IADB have downplayed criticisms that have been made about their lack of consultation with local communities, claiming that “there has been transparency and dialogue with civil society that will contribute to greater integration” (McElhinny & Goss, 2003; 4). Indeed, as the next section explores in more detail, the IADB have in fact, as part of the Sustainable Development Initiative (IMDS), incorporated an Indigenous Consultation and Project Design (ICP) component into the PPP, which, according to the Bank, has allowed for improved dialogue and participation between civil society and the PPP promoters. Although the incorporation of this component may seem a step in the right direction, it does not necessarily mean that civil society can exercise their influence over the direction of the PPP projects.

Having looked at some of the environmental and social impacts of the PPP, it is clear that the PPP is not an initiative designed to improve the lives of the region’s inhabitants. However, even though, as this section has demonstrated, the PPP has a strong neoliberal outlook, perhaps, with the establishment of the PPP’s sustainable development initiative (IMDS), the PPP promoters may be able to shift the PPP in a direction that is less externally-oriented and less market-driven and more towards a plan that will actually benefit the people of the region. As section 6.5 explains, the IMDS is the keystone of the PPP repackaging and is a way for the PPP promoters to try and promote a more environmentally friendlier image for the PPP and improve its social profile. Indeed it is this particular initiative of the PPP which acts as the central pivot that is now intended to link the PPP and the MBC. The next section explores the relationship between the MBC and PPP in more detail, by focusing on the IMDS.
link, and tries to unveil what seems to be happening behind two of the most controversial projects in the Mesoamerican region.

6.6 The relationship between the PPP and the MBC

6.6.1 The Mesoamerican Initiative of Sustainable Development (IMDS)

The strongest link between the PPP and the MBC is the sustainable development initiative of the PPP (Iniciativa Mesoamericana de Desarrollo Sostenible - IMDS) (see table 6.2 above) for which the Nicaraguan government has responsibility. In order to promote the importance of environmental sustainability as a key principle within the PPP, in 2003, IADB officials, PPP commissioners and environmental Ministers from Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Mexico, signed a Memorandum of Understanding on the IMDS (CCAD-INCAE, 2004). The Memorandum commits these regional governments to “practices of environmental management and sustainability for all projects within the PPP portfolio” (McElhinny and Gross, 2003; 1). According to an official PPP report prepared by the IADB (2003a; 3), the IMDS has been adopted;

“as a pragmatic transversal frame for the PPP to ensure that all programs and initiatives include environmental management and promote conservation and sustainable management of natural resources”.

In this light, therefore and based on the concepts of sustainable development expressed in the Central American Alliance for Sustainable development (ALIDES) (see discussions in section 3.4), the IMDS’s short, medium and long term actions and programs, whilst mainly focusing on the economic potential of the region’s natural resources, are intended to help strengthen the region’s capacities in areas such as environmental policy development, harmonisation of environmental standards, norms, best practices and environmental management governance (IADB, 2003b; Lanuza, 2004). Since the memorandum was signed, the PPP Executive commission, the CCAD and the Mexico
SEMARNAT\textsuperscript{139} have assumed the responsibility of carrying out the IMDS (PPP, 2003). Table 6.3 outlines the main objectives of the IMDS.

\textbf{Table 6.3 - Objectives of the IMDS}

1. To promote conditions for integrated regional sustainable development that increases the population’s quality of life.

2. To promote conservation and sustainable use of natural resources in order to increase the population’s quality of life.

3. To protect biological and cultural diversity in the region.

4. To strengthen participatory management mechanisms, especially with local and indigenous communities.

5. To promote mainstreaming sustainable development criteria in all PPP initiatives.

6. To support harmonization of different environmental management regulations.

7. To ensure a linkage between the environmental and agricultural components.

IADB (ND); PPP (2003); McElhinny and Gross (2003)

In order to achieve these objectives, the IMDS has four operational programs;

1) The Mesoamerican Biological Corridor itself (MBC) (see chapter 5);
2) The Mesoamerican Program for Environmental Management Systems (PROSIGA);
3) The Mesoamerican Program for Sustainable Development of Natural Resources in Multinational Areas;
4) The Agricultural and Rural Development Program.

Officially included in November 2003, the agricultural and rural development program (Desarrollo Agropecuario y Rural - DAR) has been added as an additional component to the IMDS (Presidenica de la Republica, Nicaragua, NDb). This PPP environmental management and analysis framework builds upon at least three existing frameworks; the MBC Business Plan (see chapter 5: section 5.1.4 and 5.2.1), the regional environmental plan for Central America (PARCA) (see chapter 3 section 3.4) promoted by the CCAD\textsuperscript{140} and the national environmental and the natural resources program of the National Development

\textsuperscript{139} SEMARNAT is the Ministry of the Environment and Natural Resources in Mexico.
\textsuperscript{140} The CCAD is a regional entity whose purpose is to strengthen regional cooperation among national bodies responsible for managing natural resources and the environment, facilitating and promoting activities in the environmental field (see chapter 3 section 3.4).
Plan of Mexico (McElhinny and Gross, 2003; IMDS-PPP, ND). The signing of the Memorandum of Understanding of the IMDS, states that the participant countries have each agreed to adopt the MBC Business Plan as a tool to find economic resources and promote the development of its strategic action areas; harmonisation of policies, natural resources commodification, communications, sustainable production, management of natural areas and strategic information (IMDS, 2003; Lanuza, 2004).

Following the 5th Summit of Dialogue Mechanisms and Coordination of Tuxtla Gutiérrez, held in Merida in June 2002, the presidents of the eight countries expressed their desire to promote the participation of indigenous people within the PPP framework (IADB, ND). As part of the IMDS, the PPP promoters therefore launched a project called the Indigenous Consultation and Project Design (ICP) which aims to encourage participation with indigenous communities that live within the MBC and the PPP area (IADB, 2003a; IADB, ND). According to the IADB, the incorporation of ethnic and indigenous participation into the PPP initiatives permits these communities to access markets that had previously been difficult to access (IADB, 2003). More specifically the program intends to;

"contribute to improving the life quality of the indigenous peoples, black communities and local communities of Mesoamerica through the productive process of development that guarantees the natural resource's sustainable use which can be converted into direct benefits" (IADB, 2003a; 7).

To facilitate this, in June 2003, the GAPIE (Grupo Asesor para la Participación Indígena y Étnica) was formed; an agency which gives priority to indigenous and ethnic participation and consultation (IADB, ND). Some of the aspects of the project are;

- To provide training to organisations and indigenous communities in relation with the projects happening in the MBC frame, as well as other issues related to sustainable development;
- To carry out a consulting process in the seven Mesoamerican countries, where indigenous peoples that are residents within the MBC will have the opportunity to directly influence the project's content and focus;
- To develop contributions within this consultation basis, for the design of a regional project that focuses on the integrated management of ecosystems for the indigenous communities of the MBC;
- To support the development and consolidation of a regional development strategy (IADB, 2003a).

The project's cost is US $1,099,000 and some funding has already been secured from the Japan Special Fund in the IADB, as well as from the CCAD, the governing body behind the MBC initiative (IADB, 2003a; Ramirez, 2003). Project execution is through RUTA (Unidad Regional de Asistencia Técnica), in coordination with SICA and in consultation with CCAD, ACICAFOC and FONDIN (Fondo de Desarrollo de Los Pueblos Indígenas de América Latina y el Caribe) (IADB, 2003a). As discussed in chapter 5 section 5.3.2, ACICAFOC is also the organisation behind the incorporation of indigenous, campesino and black communities into the MBC initiative. Not only does this particular program demonstrate a strong interconnectedness between the MBC and the PPP initiatives, but also from a rhetorical point of view it seems that the PPP promoters are at least attempting to acknowledge the importance of the corridor as well as the people living within it.

Although starting nearly one year after the initial launch of the PPP, according to the IADB-PPP team, in 2002, four consultations were held with civil society in Belize, Nicaragua, Honduras and El Salvador that concern the PPP projects (IADB-PPP, 2002). Consultations were also held with civil society in Costa Rica and Panama (BIC, 2007c; BIC, 2007d). However, whilst it would seem that the PPP promoters are attempting to incorporate indigenous and local communities more effectively into PPP decision-making, to date there has been no record of any concrete development plans that have been heavily influenced by indigenous peoples. Even if communities have been consulted, in many cases the consultation processes have been criticised as being 'rigged' with the meetings merely consisting of people who are in support of the PPP and its objectives (Pickard, 2004). Moreover, the Indian Law Resource Centre (ILRC), a US based non-profit legal advocacy firm, have complained bitterly about the rushed process of approval for the IADB Indigenous People's Policy. A representative from ILRC criticized the fact that;
the IADB has not gone far enough in recognizing and respecting the rights of indigenous peoples to own, manage, and control their lands, territories, and natural resources as an important prerequisite for addressing the root causes of the poverty and discrimination that indigenous peoples face” (BIC, 2005).

This implies that in reality little has changed in the way of improved local participation in decision-making since the repackaging of the PPP in 2003 “since indigenous people continue to receive the customary treatment of passive recipients of what are little more than power point presentations” (Pickard, 2004; 5).

The second operational program of the IMDS is the Mesoamerican Program for Environmental Management Systems (PROSIGA), which has been a project of the CCAD’s since 1999 (see chapter 3 section 3.4). This particular component aims at establishing frameworks and procedures and builds capacity for a standard of environmental management and impact assessment (Lanuza, 2004; McElhinny and Gross, 2003). The approximate cost of the PROSIGA program has been estimated at US$ 10,060,000 (IADB, 2003a). More specifically, the program intends to promote the environmental management coordination between the Central American countries and Mexico. With the inclusion of SEMARNAT in Mexico, the aim is to create a new Mesoamerican Commission. Within the context of PROSIGA, the main expected results are;

1) Technical, legal and financing built capacities for environmental authorities;
2) Develop and integrate and implement systems and incentives to expand clean production of regional public goods;
3) Financing mechanism for the protection of regional public goods (IADB, 2003a; Lanuza, 2003).

Also to be included in the program is a potentially important environmental management tool called Strategic Environmental Impact Assessment (SEIA), designed to estimate not only the direct impact of individual projects, but also the synergetic-cumulative and regional effects of the PPP activities, such as the social and environmental impacts of projects. The IADB also hopes that this tool will be able to measure the environmental impact of projects associated with the
implementation of DR-CAFTA (see section 6.7) However, whilst it is hoped that this approach will prove to be a useful tool with regard to environmental management, it still remains unclear as to what exactly a SEIA is and how it might be applied to monitor PPP activities and to how it will reflect IADB environmental standards (McElhinny and Gross, 2003).

The third operational program of the IMDS, which according to Ramirez (2003; 69) “promotes the principles of the MBC Business Plan”, is the Mesoamerican Program for Sustainable Development of Natural Resources in Multinational Areas, which links the ideas of ecological conservation and sustainable use of natural resources to the management of international border areas. However concerns have been raised with regard to the difficulties that will be involved in reaching a multinational consensus on how to environmentally co-manage common border areas (McElhinny and Gross, 2003). This program also tries to reduce the physical vulnerability of public environmental goods and services of a regional nature and to improve the living conditions of border communities by creating sustainable income opportunities (IADB, 2003a; McElhinny and Gross, 2003). The estimated cost of the program is US$ 73,580,000 (IADB, 2003a). Under the program’s auspices, the IADB is presently supporting work in the Lempa River Tri-National watershed (Trifinio), Gulf of Honduras, and Sixoala Bi-national watershed. Another four proposals are under way which include: Selva Maya (Mexico, Guatemala and Belize), Reservas de la Biosfera Plantano y Bosawas (Nicaragua and Honduras), Costa Miskita (Honduras and Nicaragua) and Costa Guanacaste (Costa Rica and Nicaragua) (McElhinny and Gross, 2003; Lanuza, 2004).

A new addition to the IMDS is the agricultural and rural development program (Desarollo Agropecuario y Rural – DAR) which was incorporated into the initiative after the proposal, submitted by the agricultural ministers of the region, was accepted at the 5th Summit of Dialogue Mechanisms and Coordination of Tuxtla Gutierrez, in 2002 (Presidencia de la Republica, Nicaragua, NDb). Based on the fact that more than 30 million people living in rural zones in Mesoamerica depend on activities related to agriculture and the
cattle sector, the DAR’s main objective, according to the CCAD-INCAE (2004; 10), is to:

“promote the rural and agricultural development of the Mesoamerican region, in such a way that the high levels of rural poverty and food insecurity are reduced, thus improving the business atmosphere and the competition of the diverse economic activities that are being conduced in rural zones, all of which is based on the sustainable management of natural resources”

In order to carry this out, the DAR is intent on:

1) Promoting the Mesoamerican integration;
2) Promoting social participation through its activities;
3) Having a tangible impact on improving the lives of people who live in rural areas;
4) Incorporating the environmental and sustainable management of natural resources within its projects;
5) Prioritising less favourable sectors within its projects such as woman, young people and ethnic groups.

The action areas of DAR include food and nutritional security; fishing planning and development; strengthening and integration of regional agro-business and markets; innovation and technological development; strengthening of agro-sanitary quality; formation of human resources on rural areas. The Central American and Mexican agricultural ministers in CORECA (Agricultural Regional Cooperation Council) intend to evaluate periodically the DAR component (Presidencia de la Republica, Nicaragua, NDb).

In order to promote conservation and the management of natural resources in Mesoamerica as well as to ensure the inclusion of environmental considerations in all the PPP initiatives, the IMDS must meet the fundamental challenges of not only obtaining funds for the projects already defined, but also integrating the components of environmental sustainability and rural development that until now have been managed separately (CCAD-INCAE, 2004). The integration of these components and the incorporation of the MBC Business Plan into the PPP, suggests how both the PPP and the MBC initiatives are essentially looking to join forces. However, although, the IMDS does seem rather impressive in its scope and tries to address as many aspects of
sustainable development and the environment as possible, a high level of scepticism exists amongst environmentalists, local communities, small farmers and human rights groups as to whether the commitments that have been made by the region's governments will be fulfilled (Paule, 2005). What must be taken into consideration is the fact that, in comparison to the older more established infrastructure initiatives of the PPP such as RICAM and SEIPAC, the IMDS is an initiative that is in the early stages of development. Consequently the role of the IMDS is still emerging and it is as yet unclear how the relationship between the MBC and PPP will develop and how successful PROSIGA and other initiatives will be. The next section looks at the implications of the joining of the two initiatives and how other key actors have viewed their mergence.

6.6.2 The Wrong Side of Sustainable Development? Confusions behind the MBC – PPP Relationship.

Although they exist in the same geographical space and are now formally institutionally linked, at first glance it seems that the MBC and the PPP are quite dissimilar. Whereas the MBC, despite the limitations discussed in chapter 5, can be considered to be unique and one of the largest global conservation strategies, the PPP is a very orthodox model of regional trade and development (Toly, 2004; Mountain Forum, 2002). However, looking more closely it is apparent that they are both bound by an explicit commitment to sustainable development, a term, as explored in Chapter 2, that is very much open to interpretation. As discussed above, from the PPP's perspective the IMDS provides the connection between the two initiatives, in particular through the Business Plan of the MBC, a document prepared by the CCAD (2002a) which places the MBC squarely in the neoliberal agenda by reflecting ideas of nature commodification and market environmentalism, (see section 5.1). In many ways, as pointed out by a World Bank representative in the region141, “the environmental component of the PPP (the IMDS) resembles the MBC; in fact it is almost indistinguishable from it”. Interviewed for this research, Gioconda

CaStillo, from the PPP Commission in Nicaragua, argued that as a result of the similarities between the two initiatives;

"it was easier for the PPP to adopt the MBC, so the business plan was taken instead of duplicating the effort. The PPP doesn’t come to displace the MBC; it comes to complement its actions that have already been taken. For us the MBC and the PPP are complementary”.

However, whilst the language of sustainability recurs, the IMDS does not cover the breadth of the taxonomy of sustainable development envisaged within the MBC (see chapter 5 and section 6.6). Moreover, whilst the main objective of the PPP is said to be “to leverage the human and ecological wealth of the Mesoamerican Region within a framework of sustainable development that respects cultural and ethnic diversity” (Declaration of the Summit of the Tuxtla Mechanism, San Salvador, 2001), the portfolio of projects of which it is composed (see section 6.2 and 6.3) suggests a concept of sustainable development that is emphatically growth-driven. This emphasis on growth was made clear during interviews with key representatives from IFIs behind the PPP. For example, Roy Barboza, from CABLEI (BCIE), argued that “the PPP definition of sustainable development is ‘to grow from the economic point of view and through this form an environmental friendship’”. This take on the concept of sustainable development quite clearly suggests that the environment is subordinate to economic growth. Indeed, Matthew Tank, an infrastructure specialist from the IADB for RICAM (transport initiative -see section 6.5), in Costa Rica also seemed to view sustainable development as little more than a mechanism to pursue economic growth. In an interview in 2005 he argued that the most important goal of the PPP is “to integrate local economies with one another and to the rest of the world by improving connection and the capacity to grow”. Also in an interview with Mr Tank’s colleague, Marcelo Valensuala, a SIEPAC coordinator for the IADB, rather than trying to view Central America from the eyes of the people in the region, suggested that “the

142 Gioconda Castillo, Assistant to PPP Commissioner Nicaragua – Interview held in Nicaragua on 19th May 2005.
143 Roy Barboza, Representative BCIE (CABLEI) – Interview held in Costa Rica on 13th January, 2005.
144 Matthew Tank, Infrastructure Specialist IADB - Interview held in Costa Rica on 21st January, 2005.
145 Marcelo Valensuala, SIEPAC Coordinator IADB – Interview held in Costa Rica on 17th January 2005.
bank sees the PPP as a base for a new Central America with a good electricity service, roads and communications under one sustainable development”. These points of view raise serious doubts about whether, for all their sustainability rhetoric, the PPP initiatives really contain the answer to the severe environmental problems and continuing poverty of the region? It would appear, as discussed in general terms in chapter 2, that the term ‘sustainable’ is being used as no more than a smokescreen over ‘business as usual’ and the continual pursuit of the consolidation of the neoliberal model for both the PPP and the MBC initiatives.

Given the econocentric vision of sustainable development expressed by key actors behind the PPP and the shift in the MBC’s governance over the years to governments and international institutions who have moulded the MBC and its guiding principles in a more neoliberal direction (see chapter 5), it is hardly surprising that the PPP team view the two initiatives as being ‘complementary’. The underlying principles of the Business Plan for the MBC are so vague, with rather abstract objectives such as the ‘harmonisation of policies’ and the ‘valuation of natural resources and economic instruments’, ‘sustainable production’ etc, that in many ways they already reflect the ideologies expressed within the PPP. It has therefore been relatively easy for those developing the PPP to build this supposed ‘sustainable development’ link with the MBC, especially when the CCAD\textsuperscript{146} are involved in both the construction of the MBC and the IMDS. At the same time, an examination of the IADB’s and World Bank’s finance portfolio for the MBC (see section 3.5), reveals where these IFI’s have their emphasis and how they have built this link between the two initiatives. More investments, for example, are being channelled into projects that are indirectly related to the MBC initiative supporting the more conventional development projects of the World bank (US $4.54 billion) such as in the agricultural, transportation, sanitation, social investment, infrastructure and energy sectors. Substantially fewer investments are being allocated to

\textsuperscript{146} As pointed out in chapter 5 section 5.3.1 the CCAD is an institution that was created at the same time that neoliberalism was becoming the dominant discourse in the region. This demonstrates how neoliberalism has served to influence the regional environmental agenda.
traditional conservation efforts directly related to the corridor (US$ 888 million) such as the conservation and management of forest resources, biodiversity, watershed management, land administration and ecotourism (Zinn, 2002). However, even then, critics have argued that ecotourism development linked within the framework of the PPP “has favoured large hotel corporations and not the indigenous federations or small scale initiatives” (World Tourism Organisation, 2002). In this way, therefore, the blending of the PPP and the MBC, reflects more the collaboration of institutional ideologies and objectives at the regional level, rather than the initiatives' objectives themselves.

It is interesting to note that, whilst the PPP documentation states clearly its use of the MBC in its discussion of the objectives of the IMDS, surprisingly this incorporation has not been officially acknowledged in MBC documentation, even when some of the PPP investment has come from the same institutions that have been funding the MBC, such as the World Bank and the IADB. This has therefore made the relationship between the two initiatives rather complex to understand and has left the different actors and members of civil society rather perplexed as to what actually is going on. While one of the top priorities of the IADB, is to develop “mechanisms to connect projects already in execution in the MBC to the IMDS” (McElhinny and Gross, 2003), Lanuza (2004; 5) argues that this inclusion of the MBC Business Plan in the Memorandum of Understanding of the IMDS (see section 6.6.1);

“has not yet been made clear in the running programs of the MBC. The MBC started in 1997 and is a project by itself, but has been taken over by the PPP. The official PPP document of August 2003, indicates that funds have already been allocated for that purpose, however in MBC documents there is no connection of their projects to the PPP agenda”.

Even Douglas Graham147 from the World Bank suggested in an interview in April 2005 that “there is no official declaration to link the two. The different communities behind the projects are not talking too much”. He then confirmed that “the World Bank has had no input in the PPP” even though there is

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147 Douglas Graham, Biodiversity Specialist World Bank – Telephone Interview to Washington DC, 19th April 2005
documentation that states that they are one of the principal lenders for the PPP (Cappi, 2003; Pickard, 2004; Warpehoski, 2004a). Nevertheless, an interview with the Ex-director of the MBC, Lorenzo Cardenal148, suggested, in direct contradiction to the above, that the two initiatives were definitely looking to join, he revealed that;

"We have decided that it is better to work with the PPP so that we are inside and have access to hard information. We can act as their voice of conscience, as the PPP is not a holistic intervention as it stands at the moment. The environment should be a key element of the PPP not just an accessory element".

With this in mind, it seems strange, therefore, that a representative from the main IFI backing the MBC, the World Bank, who according to the Minister of MINAE Costa Rica “have a strong relationship with the IADB”, is unaware of the joining between the two initiatives. However, the controversy that surrounds the joining of the PPP and the MBC, seems to be covering up what is happening in reality; two contradictory neoliberal strategies coming together, one that claims to ‘protect’ the environment whilst the other, with the help of improved infrastructure, trade facilitation, privatisation and foreign investment, wishes to intensify the utilization of the region’s natural resources to boost its economies. In an interview for this research in 2005 Pascal Girot149, noted that one of the reasons, on the MBC’s part, for seeking to develop an alliance with the PPP was that the 6-year PPCBM project (see section 3.5.4) was coming to an end late 2005 and;

"the only potential sources of funding would be the PPP, which has in common this connectivity. The Business Plan, therefore, is a strange hybrid with which they are trying to sell the MBC to the PPP".

William Borges150, the general Co-ordinator of SIEPAC backed this up by asserting that “the relation the MBC has with the PPP is purely the need for funding”. At the same time, having received a lot of criticism after its launch in

148 Lorenzo Cardenal, Ex General Director MBC - Interview held in Nicaragua on 5th May 2005
149 Pascal Girot, Environmental risk advisor for the UNDP – Interview held in Costa Rica on 24th November 2004.
150 William Borges, Empresa Propietaria de la Red (SIEPAC) General Coordinator – Interview held in Costa Rica 19th January 2005
2001 (see section 6.5), one of the most obvious ways to clean up the PPP’s image and make it seem more environmentally and socially friendly was to incorporate the MBC, with or without the MBC representatives knowing, as Pascal Girot states:

"the PPP has never taken into account the contribution of healthy ecosystems to regional economies in Central America and one way of doing that would be to link it to the MBC to green itself".

This suggests that if the PPP and MBC were to join, there could be a symbiotic relationship; The PPP becomes green, the MBC gets more funding. However is this happening in reality? A representative\textsuperscript{151} from GTZ working on the MBC in the Managua office seems to think not; “the joining of the MBC and the PPP sounds very beautiful, but it won’t work as the people who work in economic development are always stronger and the environment comes second”. The former secretary of the CCAD, Jorge Cabrera\textsuperscript{152}, also revealed in an interview, that he was disillusioned by the joining together of the MBC and PPP, lamenting that;

"in the period of Mauricio Castro, who came after me in the CCAD, they made a serious mistake in incorporating the MBC to the PPP. It was a political error, as they are not compatible”.

Of course, many environmentally and socially orientated NGOs have remained sceptical about the two initiatives whether they were joined or not. Clemente Martinez\textsuperscript{153}, from Centro Humboldt, for example, suggests that the MBC is merely a strategy “to identify areas where the resources are and how much they are worth and then they can be accessed by the PPP”. This underlines the current neoliberal drive behind the MBC by suggesting that the MBC is being used as a tool for valuing and comodifying nature, transforming it into a product, which can then be utilised for the more corporate purposes of the PPP. Other NGO representatives also support this interpretation. Andrea Meza\textsuperscript{154},

\textsuperscript{151} Representative GTZ - Interview held in Nicaragua on 10th June 2005
\textsuperscript{152} Jorge Cabrera, Ex – Secretary CCAD– Interview held in Guatemala on 22\textsuperscript{nd} July 2005.
\textsuperscript{153} Clemente Martinez, Campaign Coordinator Centro Humboldt - Interview held in Nicaragua on 17\textsuperscript{th} May 2005
\textsuperscript{154} Andrea Meza, Director CEDARENA - Interview held in Costa Rica on 6\textsuperscript{th} January 2005
from CEDARENA a Costa Rican NGO working on environmental law, for example, argues that "the MBC is more of a political mask to go ahead with the PPP". Indeed, with the increasingly neoliberal focus of the MBC it would be easy for PPP promoters to utilise the MBC as a strategy to raise the environmental profile of the PPP without really changing either the overall emphasis of the projects which constitute the PPP or its underlying philosophy. Grace Garcia\(^{155}\) from COECA - la Ceiba (Amigos de la Tierra) made this clear by suggesting that both "the IADB and the World Bank are deliberately trying to disorientate people with their different packaging of projects which have the same objectives". Additionally, in an interview for this research in 2005 Alejandro Jimenez\(^{156}\) from IUCN Costa Rica believed that "the MBC and PPP are parallel projects where the US are trying to expand control over the area" as are other neoliberal governments and corporations, especially with the increase in privatisation under the recently signed DR-CAFTA (see section 6.7). However, Archie Carr from the Wildlife Conservation Society and one of the pioneers behind the Paseo Pantera (see chapter 5 section 5.1.2), interestingly, has a different outlook on the relationship between the two initiatives thinking that "the two corridors can be mutually enforcing. What is incompatible are conservation and poverty, not conservation and development" (Carr, 2002). This may be a valid point, but the PPP, although it claims to ‘tackle poverty’, is by no means resolving it, with mega infrastructure projects seemingly only designed to benefit big business. From a government perspective, a representative from MARENA in Nicaragua and the director of commerce and the environment, Maria Rivas\(^{157}\), also saw the positive side of the relationship by stating that "the MBC and PPP can cohabit depending on the kind of projects that are developed between them. It could be positive as they could bring development and conservation together". However, as Olga Corrales\(^{158}\), from the UNDP, stated, "the impacts will depend on how the PPP is carried

\(^{155}\) Grace Garcia, Representative COECO La Ceiba - Interview held in Costa Rica on 18\(^{th}\) January 2005
\(^{156}\) Alejandro Jimenez, Representative IUCN Central America - Interview held in Costa Rica on 13\(^{th}\) November 2004
\(^{157}\) Maria Rivas, Director of Commerce and Environment, MARENA – Interview held in Nicaragua 11\(^{th}\) May 2005
\(^{158}\) Olga Corrales, Environment Program Office UNDP - Interview held in Costa Rica on 24\(^{th}\) January 2005.
out", and how the concept of sustainable development is interpreted by not
only the PPP promoters but also by the respective governments.

The way to explore the relationship between the PPP and the MBC is through
looking at the impacts of specific projects. In many cases, there are areas of
direct conflict between the two initiatives that are emerging within the region.
One project with such conflict, which has a particularly high international
profile, has been the construction of the Chalillo Dam on the upper Macal river
in Belize by a Canadian electricity company, Fortis Inc (World Rainforest
Movement, 2003b). This hydroelectric project forms part of the PPP and has
been built in the Maya Forest, fracturing the largest tract of contiguous forest
north of the Amazon Basin and one of the cornerstones of the MBC (World
Rainforest Movement, 2003b). After considerable debate, the dam development
was approved by the Privy Council in London in 2004 (as Belize is part of the
Commonwealth) and constructed in 2005 flooding more than 1,000 hectares of
the surrounding rain forest. The construction of the dam has displaced
hundreds of species of birds and animals including the foraging area for jaguars
from the nearby reserve, as well as the unique riverbank feeding grounds for
the Baird's tapir, Belize's national animal, listed as endangered by the
International Conservation Union (Ysaguirre, 2007; World Rainforest
Movement, 2003b). The Belize Electricity Company Limited (BECOL) are also
now pushing for another 18 megawatt hydro facility to be built upstream in the
Cayo district (Ysaguirre, 2006). Another potential high impact, but recently
discarded, hydroelectric dam proposal, was the Boruca Dam in Southern Costa
Rica, a government plan since the 1970s, which if it had gone ahead, could have
displaced hundreds of people including the local indigenous population of
Boruca and Curré as well as caused irreversible environmental damage. With
grassroots resistance from local indigenous groups, the Instituto Costarricense
de Electricidad (ICE), the public entity in control of Costa Rica's electricity and
telecommunications, were forced to search for a better alternative. In 2004,
therefore, the ICE conducted studies that assessed the feasibility of constructing
another dam, named the Veraguas dam, which would be situated within the
same basin\textsuperscript{159} a little further north of the one proposed for Boruca. The studies revealed that both the environmental and social impacts of building Veraguas would be significantly less than the impacts of the Boruca dam (ICE, 2006). However, Guevara (2006; 10) argues that the Veraguas dam will still destroy indigenous territory. Both proposals have been linked to the PPP. In an interview for this research in 2005, Edgar Silva\textsuperscript{160} from Mesa Indígena, a Costa Rican organisation that represents several indigenous groups in the country, made it clear that “the Borruca project was related to the PPP and aimed to sell electricity to Central America, Mexico and Colombia”. Now the Veraguas project has been tied into SIEPAC, which as already discussed, is the cornerstone of the Energy Connection initiative for the PPP (PPP, 2006). However, PPP project coordinators such as Marcelo Valensuela\textsuperscript{161} continue to deny this fact stating that, “big dams have nothing to do with the PPP”. As mentioned in the last section, hydroelectric dams are now being considered as ‘secondary projects’, a tactic that is hoped will clean up the image of the PPP.

Other areas of direct conflict include the dry canals proposed for the RAAS region of Nicaragua, which, with the construction of a series of 500 foot wide rail corridors carving through unique and biodiverse ecosystems, will clearly be at odds with the Nicaraguan Atlantic section of the MBC (see section 6.5). Also, in Chiapas, south Mexico, petroleum exploratory activities are already underway in the Lacandon Jungle by the Mexican state owned oil monopoly PEMEX\textsuperscript{162}, another key area for the PPP. Furthermore the IADB has announced the funding for the construction of 5 hydroelectric dams on Usumacinta River, one of the major rivers in area (see section 6.5), which, like the Chalillo dam in Belize, if constructed will destroy habitats as well as displace thousands of indigenous communities living in the area. Indeed, with the Fox administration increasing privatisation in Mexico, the fresh water supplies and biodiversity found within the Lacandon Jungle are now also under threat (Zinn, 2002).

\textsuperscript{159} The basin of Rio Terraba is one of the largest river basins in Costa Rica which offers high energy making potential (ICE, 2006)
\textsuperscript{160} Edgar Silva, Mesa Indígena – interview held in Costa Rica on April 13\textsuperscript{th} 2005
\textsuperscript{161} Marcelo Valensuela, SIEPAC Coordinator IADB – Interview held In Costa Rica on 17\textsuperscript{th} January 2005
\textsuperscript{162} With total revenues of 487 billion Mexican pesos (about 49 billion USD) in 2002, PEMEX is a major source of revenue of foreign exchange as well as funding to the national government (Bach et al. 2005).
Protected areas, for example, within the MBC, such as the Lancadon jungle, although under the premise of protection, are, according to some, being opened up for exploitation by pharmaceutical and seed companies, seeking to patent biological matter (Cappi, 2003; Luna, 2002; Ramos, 2004). One of the major bioengineering companies in the world, Pulsar (world’s number nine biotech company), has already signed agreements to work jointly in the Lacandon jungle with Conservation International.

Conservation International is an NGO on whose board sits the Director of Pulsar himself, Alfonso Romo, potentially the most influential person in the Fox administration and other directors from giant corporations (Cappi, 2003; Ramos, 2004; Zinn, 2002). For such companies, like Pulsar, these areas, each with unstudied species represent the potential to commodify nature to yield new products and therefore greater profits. However for local peoples, who utilise these products in their every day lives, it can be considered as biopiracy163 (Ramos, 2004). The Costa Rican National Institute for Biodiversity (Inbio) has also cultivated a similar bioprospecting program contracting with over 30 MNCs (mostly pharmaceutical companies) to make biodiversity conservation profitable (Blum, 1993). Although a highly controversial topic, Randall Garcia from Inbio, justified this bioprospecting by making it clear that “companies can only establish their rights on the knowledge produced and not over biodiversity itself”. However this does not deter from the fact that, under the intellectual-property provisions of the recently signed Dominican Republic - Central American free Trade Agreement (see section 6.7), member countries are required to grant protections over the patenting of life forms. This would then facilitate companies to legally claim ownership over the knowledge of plants and the processes to which they are put and then make a profit using that knowledge (James, 2005). Consequently, under the veil of the MBC and the pretence of encouraging environmental sustainability, the PPP could be accused of encouraging the privatisation of biodiversity to satisfy corporate interests by which both initiatives are seemingly fuelled. Indeed, the engagement of an

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163 Biopiracy is the theft of biodiversity and indigenous knowledge through patents and usually diverts scarce biological resources to monopoly control of Northern corporations (Ramos, 2004).
NGO like Conservation International with such an agreement has led to considerable debate as to the actual legitimacy of NGOs and their role within both the MBC and the PPP (see chapter 7 section 7.2).

As the two initiatives become more intertwined and with the IADB and the World Bank financially backing each others initiatives, the future ownership and direction of the MBC is now precarious and uncertain. As Pascal Girot points out;

"They are two separate initiatives and the relationship between the two is very unclear. It's a fight between a tiger and a tied up donkey. The weaker of the two is the MBC. I don't see them functionally linked. The PPP is planning that is needed, but it is all about road building, a very generic boring view of development, and there is no incorporation of rural communities."

In this way, the MBC’s weakness, combined with the influence of the PPP promoters over the MBC’s direction, could mean that the MBC’s objectives may become completely lost in the broader neoliberal agenda. At the same time the incorporation of the MBC to the PPP, in the hope of disarming criticism of the latter, may have ended up damaging the social and environmental credentials of the MBC itself. In essence, even with the joining of the two initiatives, the PPP has not changed as “it still continues to be a custom-designed initiative for big-money interests” (Pickard, 2004; 6). With this in mind, Lorenzo Cardenal’s hope of the MBC becoming the PPP’s ‘voice of conscience’ would be an unlikely occurrence, as with so little of the PPP funding being channelled into non-infrastructure projects (approximately 3%) and with the PPP’s such clear-cut neoliberal objectives of free trade, privatisation etc, the MBC may just become no more than a deceptive ‘greenwash’ over industrial and economic development, which, designed to hide the threat to land rights, indigenous practices, does little more than promote the accessibility to major biological richness for MNCs to exploit (Choudry, 2003; Ensisco, 2003). As Toly (2004; 51) states;

"combined the PPP and the MBC serve to bond the ecological and economic characteristics of Mesoamerica to form a political entity more fit for
…participation in a global political ecology intent on the continued accumulation of capital in the face of underproduction”.

Whilst the relationship between the PPP and the MBC is somewhat confusing and to some extent contradictory, the two combined, fall within the framework of another program of greater magnitude and with potentially greater social and environmental impact; the recently signed Dominican Republic- Central American Free Trade Agreement (DR-CAFTA). This agreement, which is to be implemented throughout Central America, by placing more emphasis on free markets in the pursuit of globalization, will no doubt advance the neoliberal processes at play behind the PPP and now the MBC, tying the region ever more closely into the US economy. The implications of the implementation of DR-CAFTA for the future of the MBC and the pursuit of sustainability in the region are explored in more detail in the next section.

6.7 The implications of the Dominican Republic- Central American Free Trade Agreement

Whilst this chapter has primarily investigated the potential regional impacts of the PPP and its relationship with the MBC, popular attention, debate and protest have focussed far more heavily on the potential impacts of the imminent free trade agreement with the United States. On May 28th 2004, the United States Trade Representative (USTR), as part of their strategy for pursuing regional and bilateral trade agreements in tandem with multilateral negotiations at the WTO, signed the US-Central American Free Trade Agreement (CAFTA) with trade ministers from Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua. On August 5th 2004, the Dominican Republic, having completed separate negotiations with the US was added to the agreement in a subsequent signing of all parties. The new agreement was titled the Dominican Republic-Central American Free Trade Agreement (DR-CAFTA) (Hornbeck, 2005).

DR-CAFTA was first mooted on January 16th, 2001 when President Bush formally declared his administration’s intention to negotiate a Free Trade
agreement, similar to the North American Free Trade Agreement (NAFTA) (signed in 1994 by Canada, the US and Mexico, to form the world's largest free trade area) with the countries of Central America, stating that this would be a top priority for his administration (Merino del Rio, 2003; ACERCA, 2003; Hornbeck, 2005). Since January 2003 the Bush administration has aggressively pursued the DR-CAFTA on a very short timeline. Whereas NAFTA took more than seven years to negotiate and the FTAA has been under negotiation for almost a decade, DR-CAFTA negotiations have been completed in just over one calendar year (WOLA, 2004). Interviewed for this research, Jorge Cabrera\textsuperscript{164}, ex secretary for the CCAD, suggested that the speed in which the negotiations were conducted was due to;

\textit{"a fear in the US that a leftist movement could spread, so the more neoliberal presidents started to focus on economic development following the NAFTA treaty".}

To date, all the participating countries, except Costa Rica, have ratified DR-CAFTA, with the agreement having already gone into effect in 2006 in El Salvador, Nicaragua, Honduras, Guatemala and in March 2007 in the Dominican Republic (Bilaterals, 2006a; Bilaterals, 2006b; Trade Analysis Program, 2006). Strong opposition in Costa Rica from influential social sectors has slowed the ratification process, however, the newly elected President in Costa Rica, Oscar Arias, of the PLN party, who took office in May 2006, is a strong supporter of DR-CAFTA, which could lead Costa Rica to approve the agreement within the next year\textsuperscript{165} (La Nacion, 2006; EIU, 2006; SICE, 2006).

The DR-CAFTA is designed to eliminate tariffs and trade barriers with the intent of expanding "regional opportunities for workers, manufacturers, consumers, farmers, ranchers and service providers of all participating countries" (USTR, 2005; 12) and will allow for easier movement of goods and services across international borders (Oxfam America, 2003). Through this

\textsuperscript{164} Jorge Cabrera, Ex – Secretary CCAD– Interview held in Guatemala on 22\textsuperscript{nd} July 2005.

\textsuperscript{165} On April 13th 2007, Oscar Arias announced that his government will hold a referendum on DR-CAFTA in three months time that will allow Costa Ricans themselves to decide the future of the law in the country. However there is concern that there will be corrupt political manipulation of the votes (Resource Center of the Americas, 2007).
liberalisation of markets, DR-CAFTA aims to advance trade and to forge closer economic relations between North and Central America. According to Brown and Cortes-Ramos (unpublished; 22) the basic claims made by DR-CAFTA promoters are that the agreement will;

1. Promote economic growth through the exploitation of new export opportunities such as non-traditional agricultural exports, commodities and new light industries;
2. Make temporary trade preferences (granted under the Caribbean Basin Initiative\textsuperscript{166}) permanent and expand Central America's export quotes in the US market;
3. Create more jobs and better employment conditions through enhanced levels of inward investment;
4. Help the struggle against poverty and the over-exploitation of labour;
5. Expand the range and quality of goods and services available to Central American consumers; and
6. Improve the productivity and competitiveness of Central American businesses.

In many ways DR-CAFTA, seeks to intensify the three fundamental components that have guided the structural adjustment policies of neoliberal globalization over the last two decades; market opening, deregulation and privatisation; - a recipe which many critics claim has availed the region of nothing more than "hunger, more inequality, more exclusion, more unemployment and more corruption" (Merino del Rio, 2003). Not only will DR-CAFTA accelerate and deepen these liberalising processes but also, as Brown and Cortes-Ramos (unpublished; 5) argue, the agreement;

\textit{"stands to radically transform how Central America interacts with the global economy particularly in terms of the dynamics of their regions relationship with the US economy".}

Indeed, DR-CAFTA can also be seen as a stepping-stone towards the Free Trade of the Americas Agreement (FTAA), another more ambitious free trade agreement, designed to provide free market access for goods and services across the entire continent encompassing all the South American and Caribbean nations except Cuba, as well as those of North and Central America (Weiss, \textsuperscript{166} The Caribbean Basin Initiative is intended to facilitate the economic development and export diversification of the Caribbean basin. Initially launched in 1983 the CBI currently provides 24 beneficiary countries with duty-free access to the U.S. market for most goods (USTR, ND).}
2003; USTR, 2003; ACERCA, 2001; Rojas, 2004). Through the FTAA, the United States plans to turn the continent into a single market of 800 million consumers under the hegemony of its own corporations so that they can compete with the European and Asian Blocs under better conditions (Swedish, 2003). As the ex-US Secretary of State Colin Powell said with startling frankness;

"our objective with the FTAA is to assure for American corporations control of a territory that runs from the North Pole to Antarctica, free access, without hindrance or difficulty for our products, services, technology and capital through the hemisphere" (CIEPAC, 2002).

Promoters of the agreement believe that DR-CAFTA, once implemented, will encourage the process of Central American integration through contributing to greater peace, economic cooperation and regional stability (USAID, 2003). In this way, DR-CAFTA promoters assert that the agreement “will commit Central American nations to an even greater openness and transparency” (The Whitehouse, 2002) which would “deepen the roots of democracy, civil society and the rule of law in the region” (USAID, 2003; 2). With the agreement having only just come into effect within the majority of Central America nations, it is still too early to tell whether these objectives are being achieved. However, the fact that the draft texts of the DR-CAFTA proposals were not even made available for the public in Central America or in the US, does question this supposed ‘greater transparency’ and the democratic nature of the way the agreement has been negotiated (Engler, 2003; Rojas, 2004). DR-CAFTA promoters have also stressed the importance of reinforcing market reforms within the region, which coupled with increased trade and investment flows, are hoped to not only expand growth in the region but also “support common efforts to achieve stronger environmental protection and improved working conditions (USAID, 2003; 2). However, critics argue that DR-CAFTA will “erode key democratic norms such as workers rights and the ability to legislate environmental protections” (how environmental considerations have been incorporated into the agreement is discussed in more detail below) (Engler, 2003). There are also concerns that trade liberalisation, the main element of DR-CAFTA, may “exacerbate social and economic inequality, especially rural-
urban income disparities that are pervasive in much of the region” (Ribando, 2005). In an interview for this research in 2005, a representative from GTZ\textsuperscript{167} made these disparities clear by asserting that, “DR-CAFTA will only benefit people working in export and big companies”. Indeed, even Robert Zoellick, a US trade representative stressed how DR-CAFTA would benefit US companies asserting that the agreement

“would ensure that our companies are not disadvantaged, would build on $4 billion of US investment in the region, and would avoid erosion of US competitiveness” (The White House, 2002).

Inequality, in particular, will be exacerbated when, under DR-CAFTA, Central America are required to reduce tariffs, subsidies and other supports that protect agricultural sectors. This could cause the Central American agricultural sector, especially small producers, to collapse as heavily subsidised US\textsuperscript{168} corn and other basic grain (otherwise know as ‘dumping’) floods local markets which may lead to increased poverty and migration to cities in search of work. This can be demonstrated by the NAFTA experience in Mexico, where poverty actually increased among small farmers\textsuperscript{169}, with 55% of the region still in relative poverty (WOLA, 2004). Even though the prospects of free trade assume a ‘level playing field’, William Rodriguez\textsuperscript{170} from El Centro de Estudios Internacionales, when interviewed for this research, argued that

“you can’t compete with US producers when they have technology and credit access, transportation for commercialisation and Central America producers do not”.

On the other hand, however, Matthew Tank from the IADB claimed that;

\textsuperscript{167} GTZ Representative – Interview held in Nicaragua on 10\textsuperscript{th} June 2005.
\textsuperscript{168} The US is not renouncing its policy of agricultural subsidies of $180 billion over the next 10 year which will accentuate these problems in Central America (Merino del Rio, 2003).
\textsuperscript{169} By 1997, approximately 28,000 small Mexican businesses had been destroyed (since NAFTA) due to foreign multinational competition and their Mexican partners. Studies made by the Economic Research Institute of the National Autonomous, University of Mexico, showed that seven years after NAFTA’s implementation in 1994, some 10 million more Mexicans have joined the ranks of the poor (ACERCA, 2003; Nauman, 2001).
\textsuperscript{170} William Rodriguez. Centro de Estudios Internacionales – Interview held in Nicaragua on 22\textsuperscript{nd} April 2005.
"Central American economies are so tied into the US (70% - 80% trade) that if they don’t lower their tariffs, competitors from Africa and Asia will fill that and they will be left out of the game".

This comment suggests that the Central American nations have had very little choice but to enter into the agreement with the US. It also suggests that, whilst trade is thought of as a ‘game’ where only big producers are able to compete, very little thought has actually been given to how the poor can benefit from such an agreement.

Building on its central thread of trade liberalisation, DR-CAFTA also provides opportunities for further privatisation particularly in public services such as water and in previously untouched sectors such as education and healthcare. This neoliberal strategy views the government’s monopoly of these services, as unfair ‘barriers’ to trade and competition. However, many critics argue that privatisation, through the increase in corporate power in the region, would destroy local businesses and would essentially only benefit a tiny political and economic elite at the expense of the general public (Organic Consumers Association, 2003). Solidifying the neoliberal polices of the region, therefore, opponents to the agreement have argued that DR-CAFTA merely

“creates the regulatory and legal framework for the acceleration of corporate-led globalization in Latin America, guaranteeing MNCs to gain control of the regions abundant cheap labour forces, state owned services and natural resources” (ACERCA, 2003).

In this light, there are fears that DR-CAFTA is becoming a questionable strategy for fighting poverty (Oxfam America, 2003).

Central American governments believe that DR-CAFTA will generate more jobs in the region, make industry more efficient and productive and provide cheaper good and services (COMEX, 2004). However, critics argue that in reality, these governments are giving up their national sovereignty, both economic and political, to the US transnationals, where democracy and the rule of law are being challenged by the rule of the market (Multinational Monitor, 2004; Blanch, 2005; New Internationalist, 2004). For countries like Nicaragua, for
example, Nicaraguan campesinos interviewed for this research asserted that “the government doesn’t care about Nicaragua and about defending its origins; all they care about is bleeding out our country” \(^{171}\). “The treaty is convenient for the US and Nicaragua owes the US a lot of favours” \(^{172}\). These comments not only demonstrate how the US controls a country like Nicaragua, but they also reveal the prominence of a more local set of neoliberal ideologies that can be found within Nicaraguan elites and those pursuing DR-CAFTA within the country. Brown and Cortes-Ramos (unpublished; 14) stress the importance of conceiving neoliberalism as “more than a set of externally-imposed ideas and also recognising the degree to which the neoliberal project has itself been transformed as it has ‘rolled across the globe’”. The regional pursuit of neoliberalism was made clear in an interview with a representative from the Nicaraguan Ministry of Commerce\(^{173}\) (Ministerio de Hacienda y Crédito Público), who revealed that regional governments believe that DR-CAFTA, through the increase of exports and the boosting of economic growth, is the only way to fight poverty. However, with a trading system distorted by rigged trade rules and double standards, it will be highly unlikely that the poor will be able to benefit from increased investment and trade (Oxfam America, 2003).

As perhaps the major influence upon the region’s economic trajectory for the ensuing decades, DR-CAFTA is clearly an important and controversial issue. One of the major concerns of DR-CAFTA is the impact it may have on the environment. The US Trade Representative Robert Zoellick maintains that;

“DR-CAFTA may have positive environmental consequences in Central America by reinforcing efforts to effectively enforce environmental laws, accelerating economic growth and development through trade and investment and disseminating environmentally beneficial technologies”. (USTR, 2003; 2)

However even though Chapter 17 of the agreement tries to address potential environmental issues, there is a high risk that with the implementation of DR-

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\(^{171}\) Adolfo Valasquez - Campesino Miraflor Reserve – Interview held in Nicaragua on 3\(^{rd}\) June 2005.  
\(^{172}\) Arles Jose Pinell – Campesino/ Tourist guide Miraflor Reserve – Interview held in Nicaragua on 5\(^{th}\) June 2005.  
\(^{173}\) Albaro Porta, Asesor del Ministro, Ministerio de Hacienda y Credito Public – Interview held In Nicaragua on 3rd May 2005.
CAFTA, national environmental laws could be greatly weakened. Critics argue that the only reason for the inclusion of the environment chapter in DR-CAFTA;

"was to make people believe that it would help the region, which is far from happening. Indeed, the environmental chapter places us in danger as the country is giving up the application of important environmental instruments and reduces the environment to commercial trading" (Rojas, 2004; 23).

In essence, Chapter 17 of DR-CAFTA tries to promote the principle that each country is responsible for its own environment, subject to its own environmental laws, but the agreement does not clearly require any country to maintain and effectively enforce a set of standards for corporate responsibility on environmental issues (Quesada, 2004; Cabrera, 2004a). As Cabrera (2004b; 9) points out;

"there is no immediate obligation of harmonising nor an obligation to change the environmental laws within each participating country. There is just an ambiguous phrase within the agreement that says each country should have 'high environmental standards'".

If the environmental laws within each country are not enforced, therefore, the negotiation of a side agreement on environmental cooperation (ECA) enables action to be taken against the countries in question that would be exposed to a fine by the US for up to $15 million. However the severe lack of capacity and funds within Central America’s governmental institutions along with their institutional inefficiencies makes law enforcement a difficult task for these countries to accomplish (Cabrera, 2004a; Vargas, 2004). As the Minister of the Environment in Costa Rica, Carlos Manuel Rodriguez, suggested in an interview in November 2004 “all countries have to agree with environmental legislation, but in reality we are not able to implement, enforce or comply with the laws”. Therefore, from the environmental perspective there are concerns that governments, in fear of impacting their export sector or receiving huge fines from corporations, may lower their environmental standards weakening

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174 The environmental ministries of Central America are chronically underfunded by governments (Murillo, 2004). As a result the government’s ability to “effectively implement and enforce environmental laws is limited by the lack of fiscal and human resources” (USTR, 2003; 11). Budgets are decreasing and the requirements of ‘structural adjustment’ programs mandated by international institutions such as the IMF often divert money way from environmental ministries (Friends of the Earth, ND).
their environmental laws to continue attracting investments (The Nature Conservancy, 2005; Cabrera 2004b). This lowering of environmental standards has sparked concern amongst environmentalists that "development associated with DR-CAFTA could exacerbate the region’s existing environmental problems" (Ribando, 2005; 6). With free trade agreements such as DR-CAFTA, which encourage the export of primary resources at the lowest possible price, countries in regions like Central America,

"are caught on a destructive treadmill: resource exports increase to earn foreign exchange, world markets are over-supplied, prices fall, exports are increased to make up the drop of income which causes greater environmental destruction" (New Internationalist, 2004; 23).

DR-CAFTA, therefore, with this weakening of environmental law, along with the ease of privatising natural resources and the increase of biopiracy\textsuperscript{175}, could significantly affect the future of Central American environments.

Chapter 2 explained how difficult it is to predict and calculate what the exact impacts are of trade liberalisation and free market globalization on the environment. However there have been concerns that through tariff elimination, the agreement will accelerate the exploitation and destruction of Central America’s natural resources mainly through the expansion of commercial agricultural production (Krist, 2000; Coyler, 2002). Other environmental impacts that could occur from intensified trade liberalization in Central America include an increase in air and water pollution in maquila zones and increased illegal trade in endangered species (Brown and Cortes-Ramos; unpublished; 35) (see chapter 3 section 3.3 for a more in depth discussion about the impacts of the prevailing neoliberal model on the Central American environment). In many ways, once DR-CAFTA is in place, the potential weakening of environmental laws may allow companies, who see the environment as a barrier to mass production, to abuse the system even more than they do now. Conversely, those promoting DR-CAFTA and trade liberalization more generally argue that the successful implication of the

\textsuperscript{175} Intellectual property rules in CAFTA and the FTAA require that member countries grant protections to patenting of life forms (James, 2005).
agreement will aid the pursuit of sustainable development in the region by promoting a more efficient use of resources and more effective production methods as well as stimulating economic growth, which can be used for environmental improvements (US Trade representative, 2003). However, opponents of DR-CAFTA, have been quick to draw upon the fact that, over the preceding decades, the commercialisation of agricultural export commodities and increased production (which builds on the existing agro-export model see chapter 3 section 3.2.1) have already caused unprecedented environmental damage in the region. Questions have also been raised about the environmental implications of the types of industries that might be attracted to the region, such as those related to the PPP, as well as that of the generation of large numbers of unemployed in rural areas due to competition from industrialized and subsidized US agricultural producers (Acevedo, 2003). As Rojas (2004; 19) points out

"the environment is not a merchandise, it is an integral part of life and that's why the impacts that are caused by free trade agreements should be studied with detail, and compared with other development alternatives to decide better options for the country".

However, as DR-CAFTA becomes a reality for the majority of the region, no attempts have been made within the region’s governments to search for these alternatives. It is likely that transnationals, with the use of DR-CAFTA as a legal instrument, will continue to superimpose themselves upon the region, penetrating each nation socially and economically, whilst the region’s governments become weaker and weaker and increase their dependency on the US. In this way, agreements like DR-CAFTA, NAFTA and the FTAA, which embody neoliberal ideologies, can be seen as just one of the cogs that enable the globalization of capitalism at the expense of communities and the environment (ACERCA, 2003; New Internationalist, 2004).
6.7 Conclusion: DR-CAFTA, the PPP, the MBC and beyond

From the discussion in this chapter, it would seem feasible to say that, free trade agreements such as DR-CAFTA and infrastructure programs such as the PPP can be considered part of the same neoliberal package. Whilst DR-CAFTA essentially aims at solidifying globalization through deregulation, privatization and opening up all markets, initiatives such as the PPP have a defined role in providing the physical infrastructure necessary to implement these free trade agreements (Pickard 2002b). As the president of BCIE states “the PPP means an indispensable complement for the economic expansion of the region and a platform to prepare Central America for its entry into the DR-CAFTA (Pickard, 2004). The MBC on the other hand, as it becomes entangled within these economic development strategies and subservient to the neoliberal agenda which they are part of, now forms little more than a shock zone around them as it succumbs to the belief that economic growth and market mechanisms are the most effective distributor of both natural resources and environmental goods.

For all the millions of dollars that have been pumped into the initiative and for all the sustainability rhetoric of the MBC, it seems unlikely that the MBC will be the catalyst for real political and social change that it might have been. Whilst operating in tandem (or part of) with a series of measures designed to open the region to international market forces, to accelerate the extraction and use of the region’s resources, it seems difficult to visualize that the MBC will actually succeed in contributing towards the achievement of sustainability in the region. With international institutions, neoliberal governments and corporate elites moulding the region into a little more than a market place, concerns have been raised as to whether or not in situ conservation of those ecosystems that offer less marketable opportunities will continue once the obvious marketable opportunities have been realized (Toly, 2004). At the same time, the lack of adequate participation and consultation within the PPP and MBC agendas suggests that it is the powerful corporations who will gain access to the use-value of Central America’s rich biodiversity through bioprospecting and to a
degree through ecotourist ventures and not the Central American peoples themselves.

However, the future is not all bleak. Considering the PPP and DR-CAFTA processes from an alternative perspective, it could be argued that a major infrastructural initiative and a free trade agreement have at least been forced to pay greater attention to their environmental implications than would have been the case 20 years ago. Whilst the inclusion of an environment chapter in DR-CAFTA and the apparent attention to sustainable development that cross cuts the PPP initiatives do not necessarily mean that sustainability will be achieved, the concept at least has ‘a foot in the door’ of both initiatives. The MBC too, although it has become more neoliberal in its nature (see chapter 5) and has been increasingly linked to contemporary economic development strategies such as the PPP and DR-CAFTA, at least the initiative has been able to instigate an environmental and social awareness within the region. In many ways this can be attributed to the success of some national projects (such as the smaller corridor projects in Costa Rica for example e.g. the Osa Biological corridor and the Biological Corridor of Montes de Aguacate), which, through increased local participation, have been able to encourage the conservation of nature. Also, with ongoing research the process of environmental change in the region is being ever more increasingly understood and closely monitored. However, what needs to be recognised here, is how the information will be used in the future, as it may not all be for the sake of conservation, but rather for strategic exploitation.

Whilst the focus in this chapter has been primarily on regional and national processes, it is essentially what happens on the ground at the local level that counts. In response to corporate control over natural resources, therefore, considerable grassroots opposition has been taking place with the creation of alternative development plans as well as organised protests (Pickard, 2002a). Throughout Central America, labour unions, peasant organisations, indigenous and women’s groups have actively resisted the PPP initiative, calling for complete rejection of these neoliberal strategies protesting that they do not in
any way respond to the basic needs of the region’s people and instead will be exploiting the countries’ natural resources, labour and indigenous communities to satisfy the interests of MNCs (ACERCA, 2003). For example, on October 12th 2002 at least 40,000 people within the region came together to protest against the PPP, blocking key points on the Pan American highway and border crossings. Already a group of civil organisations from throughout the Americas, called the Hemispheric Social Alliance have drawn up detailed alternative proposals to the free trade agreements that support more sustainable rural development, ecological values and enhance food security (ACERCA, 2003). At the same time, organisations such as Action for Community and Ecology in the Regions of Central America (ACERCA), Mexico Solidarity Network, Global Exchange, and International Development Exchange plus others are working together to create an opposition called the Network opposed to the PPP (NoPPP). This project is building a campaign to educate people about the PPP and promote development of Central America in a more sustainable way that will not displace indigenous people or destroy natural water resources, forested lands, or areas where agriculture is the primary source of income (Musfeldt, 2003).

In relation to the MBC however, it will be interesting to analyse how such grassroots resistance to these mega-projects has influenced the direction of the corridor itself at the local and national scale. The true success of the MBC, therefore, cannot be determined until an analysis of what is happening at both the national and local level has been carried out. The next section, through exploring two specific national examples of Costa Rica and Nicaragua, aims to look the national and local projects under the umbrella of the MBC regional initiative and what if at all has driven their success. The response of local communities to the MBC will also be looked at, and how effective the initiative has been at this particular level.
7. The MBC at the National and Local Scale

“We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect”

~Aldo Leopold, A Sand County Almanac.

7.1 Introduction

The preceding chapters have concentrated on the broader context within which the MBC has been developed and how the initiative itself has evolved at the regional scale. However in order to understand the functioning of the MBC in more depth, it is also necessary to focus the analysis down into more localised national contexts exploring how government institutions have integrated themselves into the corridor initiative and how other actors at this scale, such as Non Governmental Organisations (NGOs) and other civil society organizations, have interpreted and embraced the MBC. This chapter starts off by exploring the relations amongst these actors within the environmental arena at the national and local levels before then moving on to explore the differences between the environmental institutional structures and strategies of Costa Rica and Nicaragua specifically. Indeed, the extent that these countries have integrated themselves into the MBC initiative depends on how (or whether) national environmental policies and regional environmental policies drawn up by governing bodies such as the CCAD (see section 3.4) are being applied on the ground and how, if at all, NGOs and local communities are working and collaborating with the regional MBC initiative and their respective states.

7.2 The Declining Role of the State and the Emergence of NGOs

In order to analyse the functioning of the MBC effectively at the national and local level, it is first of all important to consider the roles of and the dynamics among the different actors present at this scale, particularly the state and NGOs. The state, being one of the more complex actors in the environmental arena and carrying many and sometimes contradictory faces, still plays a pivotal role in the
conservation of natural resources. As we saw in chapter 3, towards the end of the 1980s, Central American governments, in response to the growing environmental crisis, started to draw up regional environmental policies and create regional environmental bodies e.g. the CCAD. However, whilst awareness has been growing within Central America overall, each individual country has also been developing its own specific environmental policies and laws to try and curb the environmental problems affecting them. Therefore, when assessing the strength and success of the way environmental issues have been dealt with in Central America, it is important not only to monitor the way in which each individual country has implemented regional policies and translated them into tangible results at the local level but also to assess each individual state’s commitment to environmental action and legislation.

However, as Bryant and Bailey (1997) suggest, in their book Third World Political Ecology, the state has a somewhat contradictory dual role of being both protector and developer of the natural environment. They argue that whilst the state may be a key actor in the protection of the environment, its umbilical tie to the capitalist system prevents it from effectively executing both roles. In regions such as Central America, the pursuit of economic development after the Second World War under the resource extraction model (e.g. Central America’s agro-export model see chapter 3 section 3.2.1) only added to the pressures on the state to neglect its environmental stewardship responsibility. Furthermore, the neoliberal reforms promoted in the 1980s by the World Bank and IMF (see chapter 3.2.2 chapter 3) which intensified the environmental pressures on the region (see section 3.3 chapter 3), forced each state to downsize public expenditure, one consequence of which was fewer resources being channelled into environment ministries making it more difficult to enact environmental protection laws (Cabrera, 2004a; Vargas, 2004). Not only has the state been subject to neoliberal reforms but also in unstable countries, other factors have taken precedence over environmental conservation such as prolonged military conflict in several countries of the region e.g. Nicaragua, El Salvador and Guatemala. In times of such conflict, political leaders sometimes ignore the state’s own environmental policies when faced with the prospect of military or political defeat and encourage
"cut and run resource extraction strategies in areas controlled by the state in order
to maximise short-term revenue" (Bryant and Bailey, 1997; 56). These problems
pooled together have made for incredible setbacks for the functioning of states and
their effectiveness in the environmental arena.

Since the peace processes of the 1990s, however, the social and political unrest in
Central America has subsided and the region is now enjoying more stability,
although many countries are still weighed down with heavy debt burdens. This
stability has given the governments of the region an opportunity to address the
growing environmental crisis that was becoming apparent by the mid 1980s and
allowed them to refocus priorities and concentrate on factors such as
environmental policy making which maybe 20 years ago would not have been a
top priority. Annis (1992; 3) points out that during the end of the 1980s and early
1990s, policy makers within Central America responded to the environmental
crisis,

"with a plethora of new ministries, task forces, and high-level commissions
[and] have issued a stream of urgent priority statements, strategy documents,
laws and regulations".

However, despite the recent upsurge in environmental policy-making, it is unclear
to what extent these are being effectively implemented; a task that becomes ever
more difficult when environmental ministries are increasingly under funded
(Murillo, 2004, USTR, 2003). Indeed, not only are there potential policy and law
implementation problems but Central American governments, particularly since
the promotion of neoliberal reform in the region, have been criticised for really
paying lip service to the seriousness of the environmental crisis and for merely
green washing their 'business as usual' ethos as they continue to open their
markets and "persist with policies that privilege economic development over
environmental conservation" (Bryant and Bailey, 1997; 58). In other words, as
Utting (1994; 242) points out;

"encouraging patterns of agricultural expansion, industrial and
infrastructural development, or mining/logging activities typically associated
with 'unsustainable development'".
Thus, whilst it would seem that environmental ministries within individual Central American countries have sometimes demonstrated a dedicated commitment to creating policies that advocate real changes in direction concerning the environment, overall government priorities, which may pay lip service to the need for change, have given precedence to other mainly economic imperatives e.g. the development of the Plan Puebla Panama and the signing of DR-CAFTA (see chapter 6).

In many areas of the majority world, including Central America, the failures of governments to effectively address environmental and social problems has created a gap within national political arenas in which we find the emergence of NGOs or the ‘third sector’ (beyond the state and private sector) (Lara, 1995; Bradshaw et al., 2002; Envio, 1994). In response to the impacts of the dominant neoliberal model and the down-sizing of the state NGOs, having exploded in number (and influence) during the late 1970s in both the North and the South, have become “the main candidates to take on the mantle of promoting just and democratic forms of development” (Macdonald, 1997; 3). With their initial rise in the post World War II period, NGOs are not a new phenomenon. Whilst for many years NGOs were perceived as peripheral actors, today they play an influential and essential role in bridging a gap between the state and civil society mainly in the form of promoting a ‘self-help’ philosophy (Macdonald, 1997; Bryant and Bailey, 1997; Brown, 2000b). In Central America, for example, NGOs, especially since the peace processes of the 1990s, have contributed and still contribute towards the consolidation of democracy through the development of organised civil society and have made way for broader citizen participation in decision-making processes (Bradshaw et al., 2002). However, NGOs cannot be viewed as homogenous units as with their different sizes, budgets, global concerns and performance of different

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176 The term NGO came into being in 1950 with the passing of Resolution 288 by the UN Economic and Social Council and was defined as being an organisation with no governmental affiliation with consultative status with the UN. Today, however, the original meaning of NGO has been lost as many different types of civil society organisations that are not directly dependent on the government seem to fall within this category (Bradshaw et al., 2002).

177 Civil society according to Macdonald (1997; 3) “constitutes the arena of organised political activity between the private sphere and the formal political institutions of governance”. NGOs, therefore, are not only part of civil society but can also act as key representatives for civil society (Potter et al., 2004; Bradshaw et al., 2002).
functions, they have the ability to penetrate many different sectors of civil society (Annis, 1987). Their key position within the political arena, therefore, along with their heterogeneity has allowed NGOs to be effective delivery agents contributing towards the alleviation of the symptoms of poverty, emergency relief, capacity building, establishing sustainable development systems, political advocacy and campaigning etc (Meffe and Carroll, 1994; Korten, 1990). Unlike the state, NGOs are not territorially tied and defined and unlike the private sector, they typically do not control sizeable amounts of capital. Many NGOs, therefore, with their emphasis upon ideas linked to sustainability and popular participation, have been tagged with a particularly moral character. Bradshaw et al. (2002; 248) suggest,

"the reasons why NGOs provide goods and services rather than private profit organisations relates first to the notion of altruism – the concern for the well-being of others – and second to better ‘development technology’ related to their superior knowledge of identifying peoples needs and priorities”.

These NGO traits have allowed them to influence the environmental policies and practices of states, businesses and multilateral institutions as well as assist with and support more grassroots conservation and development projects (Brown, 2000b; Bryant and Bailey, 1997).

Although NGOs have demonstrated that they may be more altruistic than organisations from the private sector, recent debates have arisen concerning the legitimacy and democratic credentials of NGOs and the ways in which they operate in relation to both the state and the private sector (Bradshaw et al., 2002; Brown, 2000b). Unlike state institutions, which have at least some accountability to local electorates, “NGOs are often answerable only to those who provide them with financial resources” (Brown, 2000b; 178). Ironically, therefore, funding sources for NGOs often come from actors who pursue neoliberal reform such as Northern governments as well as IFIs such as the World Bank that also support other contradicting development programmes such as the PPP (see chapter 6). Boza (1993; 245) points out that “one of the most serious drawbacks to international funds is that, in most cases, the donor decides how they will be used; rarely can we obtain funds for our own needs”. Over recent years, furthermore, IFIs have come to favour NGO activities because they have seen the benefits that
NGOs have had especially in terms of their ability to cushion the effects of the removal of public services and the downsizing of the state (Brown, 2000b; Nelson, 2002). In other words NGOs can be used as tools by IFIs to ameliorate the impacts their neoliberal reform programmes have had. As a result, NGOs have often had to compromise their primary aims by only being able to direct funds into specific projects that satisfy the whims of their funding sources (Bradshaw et al., 2002, Brown, 2000b).

In the context of Central America, powerful external neoliberal actors, such as the US government, have had an impact on the dynamics of the growth of the NGO movement, by controlling and manipulating NGO activities to benefit their own foreign policy goals. For example, the US’ own aid agency, USAID, according to Macdonald (1997; 32), have shown their support for,

"both Central American and US- based NGOs which cooperated with right wing government and military institutions, providing humanitarian and development assistance in order to legitimise existing political structures"

However, USAID’s support of right wing governments and conservative orientated NGOs changed somewhat during the Clinton years with USAID diversifying its funding portfolio to include a wider range of organisations such as the Sandinista linked farmers union, UNAG in Nicaragua (Haugaard, 1997). Also, amongst neoliberal actors such as the World Bank, there has been a new focus on providing assistance for NGO self-financing projects e.g. micro-credit schemes as opposed to supporting more collectivist approaches to social problems. In the light of this new focus, therefore, Brown (2000b; 175) points out that;

"IFIs have not only supported these schemes because they reflect their emphasis upon the private sector, but also because, along with private banks, they have seen them [micro-credit schemes] as extremely profitable".

Although these schemes may provide individuals and communities with improved economic opportunities, critics have been sceptical about their success, as in many cases micro-credit schemes have actually diverted resources away from other activities which could have had greater impacts on relieving poverty (Brown, 2000b). Indeed, it also seems somewhat contradictory that these micro-
credit schemes, having originated amongst those disillusioned by the impacts of neoliberal reform, are being supported by those IFIs who have actually promoted this reform. This raises a further point which is that, as some of the major national and particularly international NGOs have started to grow in size and expand their programmes over the years, they have required increasing amounts of funding. In these cases, NGOs have frequently sought financial support from IFIs, bilateral donors such as USAID or from the corporate sector e.g. the collaboration of Conservation International with Pulsar, one of the major bioengineering companies in the world (see chapter 6). However, financial backing from such institutions and corporations has raised concerns amongst critics as to the influence that these institutions/corporations may have over the direction of NGO projects in order to gain legitimacy for their own (Paul, 1996).

Not only has there been concern expressed over the external influences of NGOs from IFIs for example, but from a more internal perspective, some NGOs have actually been at the centre of corruption scandals. In these circumstances, NGOs have been able to capture funding which, rather than being channelled into legitimate NGO projects, has been used fraudulently. For example, the Guatemalan organisation FUNDAECO (Fundación para el Ecodesarrollo y la Conservación) which, under the guise of its establishment as an NGO and under the conceptual umbrella of the MBC, approached several international and national financial sources to fund their conservation programmes with indigenous people in the Caribbean area. However, having become efficient at deceiving the international funding entities with their complex bureaucratic system, Birriel (2006) alleges that FUNDAECO used the donors money to continue funding the lifestyles of the members of the elites that were involved with the NGO. Rather than contributing to community development and conservation projects, FUNDAECO have also used the donors’ money to buy lands within indigenous community zones and make a profit from allowing multinational biotechnology companies to conduct research. Such occurrences can clearly be used to question the accountability of some NGOs and whether they really live up to the moral reputation that they have created for themselves.
Whilst it has been argued that NGOs represent the “most active agents of civil society” (Marschall, 2002), some argue that their:

“contribution to the global development remains limited...as the systems and structures which determine the distribution of power and resources within and between societies remains unchanged” (Edwards and Hulme, 1992; 13).

However, it is worth remembering that not all NGOs are the same; many NGOs are working on different sets of issues at different scales and conducting different relationships with states and international actors. In this way, whilst the argument put forward by Edwards and Hulme (1992) rings true in some cases, we cannot generalise and be led to believe that all NGO efforts are limited. On the contrary, although NGO impacts at the macro-scale may, in certain circumstances, be somewhat unfelt, NGOs still remain a pivotal actor within development processes and their efforts, especially at the local scale should be recognised. In this way and within the context of the MBC at the national and local scale, the next sections discuss in more detail the dynamics of the relationships between NGOs and states in the region using Costa Rica and Nicaragua as the two country case studies.

7.3 Costa Rica and Nicaragua Compared

Having discussed the different roles of stakeholders at the national level (in terms of the environmental policy arena) and the dynamics amongst them, this section returns to the MBC to assess how the initiative has been developed at state level, using the case studies of Costa Rica and Nicaragua. Given that the MBC is a ‘regional initiative’ being developed across eight separate countries, there are many environmental, cultural, political, social and economic differences that must be taken into consideration when exploring its dynamics. Of the eight countries within which the MBC is being implemented, Costa Rica and Nicaragua perhaps provide the most interesting contrasts in terms of their styles of economic development, their recent political histories, the stage of evolution of their protected area systems and the overall attitudes towards sustainability of their governments. However, although these differences may exist between the two countries, Costa Rica and Nicaragua, from a more general perspective, have experienced similar types of environmental impacts over the last century, which
have been as a result of an increasing population growth\textsuperscript{178} and the intensification of economic patterns under a prevailing neoliberal model (chapter 3 section 3.3 discussed these environmental impacts in more detail for the Central American region as a whole). For example, increased agricultural expansion under an intensifying agro-export model has lead to both countries over-exploiting and destroying their natural resources. However, their political, historic, economic and environmental differences have meant that impacts on their respective environments have come about at different times, under different sets of circumstances, and with different intensities. Also, both countries' responses to their own individual environmental crises have come about differently which has ultimately influenced how they have integrated themselves into the MBC.

Bordering Panama to the South and Nicaragua to the North, Costa Rica is considered to be one of the twenty countries in the world with the greatest biodiversity\textsuperscript{179} (FONAFIFO, ND; INBio, 2005). At the same time, Costa Rica has the second-largest economy\textsuperscript{180} in Central America, as well as a long-standing commitment to democracy and social policy, which marks the country as different from the other countries in the Central American region (Latin Business Chronicle, 2005a). Indeed, successive Costa Rican governments have also been more convinced than perhaps other Central American nations, about the importance of environmental concerns, which has allowed for more and better development of its environmental policy and its protected areas system. Although Costa Rica has never experienced political turmoil to the same extent as Nicaragua and has generally been regarded as a peaceful country – its army was abolished in 1948 when the National Liberation Party (Partido de Liberacion) rose to power - it has not been without problems (Santos, 1996). Almost thirty years ago, the country

\textsuperscript{178} In 2004 Costa Rica had a population of approximately 4.3 million inhabitants. In 2015 it is expected to have 5 million inhabitants. In 2004, Nicaragua had a population of 5.4 inhabitants and this figure is expected to rise to 6.6 million in 2015 (United Nations Human Development Report, 2006).

\textsuperscript{179} Covering only 0.04\% of the world’s terrestrial area, Costa Rica has a very high biodiversity with an estimated 500, 000 biotic species (4\% of the worlds total) (Jimenez, 1995).

\textsuperscript{180} Costa Rica has facilitated economic growth via an export-oriented open economy centred on coffee and bananas. However, by 1993, tourism had become the most important sources of foreign exchange earning US$ 577.4 million, compared to US$ 531.1 million from banana exports and US$ 203.5 million from coffee exports (ICT, 1993; Honey, 2003). Today, the Costa Rican economy is one of the more diverse Central American economies with important production of non-traditional exports such as flowers, assembly line industry etc.
was faced with one of the world’s highest population growth rates, a huge international debt\textsuperscript{181}, and high deforestation rates\textsuperscript{182} mainly caused by illegal felling\textsuperscript{183} and intensive agricultural expansion such as cattle ranching (Ferroukhi and Aguilar, 2003; Sancho, 2001). Other agricultural practices, such as the establishment of coffee and banana monocultures, which require heavy use of pesticides, have also contributed to environmental deterioration within the country (Beletsky, 1998). To counteract these environmentally destructive trends and attempt to protect the biological richness of the region, successive Costa Rican governments, with the creation of new institutions and laws, responded by channelling their own energies and limited financial resources with those of outside donors into important conservation programmes (Villegas, 1998; Sancho, 2001; Vaughan, 1994). For example, in order to reverse the trends of deforestation within the country, the 1980s saw a large increase in the number of agro forestry and social forestry projects (Utting, 1994) (see figure 7.1).

\textsuperscript{181} By 1985 the external debt amounted to $3.8 billion and was the largest per capita debt in the developing world (Evans, 1999)

\textsuperscript{182} Between the 1950s and the 1970s the deforestation rate in Costa Rica was approximately 50,000 hectares per year (Sancho, 2001). The result was that by the 1980s Costa Rica was one of the most deforested countries in the region with an estimated forest cover of only 29\% (Chomitz \textit{et al.}, 1998).

\textsuperscript{183} Recent data indicate that 35\% of the timber extracted is carried out illegally (MINAE- Oficina Nacional Forestal-UNDP, 2002).
Figure 7.1 - Changes in Forest Cover in Costa Rica between 1940 - 1997

As a result of such projects, along with the a reduction in cattle ranching, by 1997 the forest cover in Costa Rica had increased considerably to an estimated 40.4% of the national territory and by 2002, this figure had reached 45.4% (Kerr et al., 2006; FONAFIFO, 2002). As the next section goes onto discuss, Costa Rica has often been singled out for praise for its environmental policies and is world-renowned for its conservation programmes which have made it one of the most famous ecotourist destinations in the world. Perhaps the most well known of these programmes and the one most related to the MBC initiative has been the development of its national system of protected areas, which was initiated in the 1970s, and protects more than 25% of the national territory (Vaughan, 1994; FONAFIFO, ND; Sancho, 2001).

Nicaragua, is not as biologically diverse as Costa Rica but still;

"has the largest tropical rainforest north of Amazonia, the most extensive seagrass pasture in the Western Hemisphere, the widest continental shelf and stretch of coral reefs in the Caribbean, the longest river, largest lakes, richest volcanic soils and least populous in Central America" (Nietschmann, 1990; 42).

However, Nicaragua also has the poorest economy in Central America and the second poorest in Latin America after Haiti, which has deterred the country from efficiently conserving its resources. Also the fact that Nicaragua has had the greatest number of revolutions, civil wars, and foreign military interventions, and the longest reign of dictators of any country in Central America has also hindered the implementation of effective environmental protection (Latin Business Chronicle, 2005b; Nietschmann, 1990). In the early 20th century US timber, banana and mining companies began to exploit the country’s natural resources indiscriminately. Then during the 43 years (1936 –1979) of the dictatorship of the Somoza regime destructive exploitation of the environment accelerated (Karliner and Faber, 1986 cited in UNEP-WCMC, 1992; Nietschmann, 1990). In the 1950s and 1960s agricultural production increased dramatically, especially with the area

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184 Nicaragua has a lower biological diversity compared to its neighbours due to its lower altitudinal diversity and absence of isolated high mountain ranges (Cedeno et al., 1992).
of land planted in cotton, which increased four-fold\textsuperscript{185}. This not only led to an increase in pesticide contamination but also to widespread deforestation and erosion. Environmental problems worsened during the 1960s and 1970s with the spread of cattle ranching by \textit{latifundistas} (large-scale landowners) which gave rise to one of the world’s highest deforestation rates\textsuperscript{186} and the largest exports of Central American beef to US fast-food and pet markets\textsuperscript{187} (Nietschmann, 1990; Karliner, 1987). Indeed, the subsequent displacement of many \textit{campesinos} (small-scale farmers) to rain forest regions, increased deforestation rates even further. During the 1970s alone almost 30\% of the country’s tropical rainforest was destroyed (Karliner, 1987). This deforestation, was not helped by the fact that before the 1979 revolution, the Nicaraguan government had no national conservation objectives or policies nor any institutional framework to implement or support environmental protection (Anon, 1989; Hartshorn and Green, 1985 cited in UNEP-WCMC, 1992). It is no wonder, therefore, that environmental policy making in a country like Nicaragua, which has been repressed under a long standing regime and steeped in years of political turmoil, social unrest and economic instability, has taken longer to develop than in its next door neighbour. However, although Nicaragua may not have taken measures to protect its environment as early as Costa Rica, steps have been taken to try and improve the protection of its environment. The next section explores in more detail the evolution of the environmental institutions and environmental policy making in both Costa Rica and Nicaragua and how, in the context of the corridor, the MBC initiative has been integrated into the different systems of protected areas within each country.

\textsuperscript{185} Between 1950 and 1973, the area in cotton production expanded from 4,000 to 85,000 acres, making Nicaragua the fifteenth largest cotton producer in the world by 1971 with the fifth largest yield per acre (Envio, 1989).

\textsuperscript{186} Since the 1950s, the total forest cover of Nicaragua has been reduced from 7 million ha to an estimated 3.5 million ha in 1998 with its forests disappearing at a rate 10 times faster than those in Amazonia during the 1990s. In recent years the annual deforestation rate has been approximately 87 000 ha/year (UNDP, 1999; Barany \textit{et al.}, 2002)

\textsuperscript{187} This relationship between increased forest clearance in both Costa Rica and Nicaragua and the high demand of beef in the US was later coined “the hamburger connection” (Nations & Komer, 1987).
7.4 Background to Costa Rica’s Environmental Institutional Structures and Strategies

Having a more stable political history than Nicaragua, Costa Rica has in many ways been able to focus on creating and consolidating its environmental institutional structures and strategies in response to the regional environmental crisis. According to the Costa Rican National Fund for Forestry Financing\textsuperscript{188} (FONAFIFO) (ND; 10), Costa Rica has been “recognised for the development of management, conservation and sustainable development strategies for natural resources, as well as new funding mechanisms”. This has meant that the country has created a worldwide reputation for itself as a world leader in conservation, with a tradition of consolidating national parks, of generating a culture of decentralised participation in their administration and of developing scientific research on biodiversity and conservation management. Indeed, the importance that successive governments have placed on their environment has made Costa Rica one of the key building blocks for the MBC. However, whilst at the national policy level Costa Rica is creating a good name for itself, it is important to explore the extent to which these national policies and conservation strategies are actually having tangible impacts on the ground.

While natural resources regulation in Costa Rica dates back to 1853 when hunting was prohibited close to human settlements, Costa Rica’s formal conservation history dates from the signing of the Convention for the Protection of Flower, Fauna and the Natural Science Beauties of the Countries of America in 1942 (Convención sobre la Protección de la Flora, de La Fauna y de las Bellezas Escénicas Naturales de los Páises de América) (see table 7.1 below). With concern for the sustainability of the country’s natural resources becoming more prominent during the 1940s\textsuperscript{189} and 1950s, Costa Rica’s first private protected area was eventually established in 1963 (Cabo Blanco Island) (SPN, 1979 cited in UNEP-WCMC, 1992; Corredor Biológico Mesoamericano, ND; Weaver, 1998). As the

\textsuperscript{188} FONAFIFO is the institution that, once a management plan and a petition are approved, wires the payments to the landowner that applied for the environmental services payments (see below) (Sancho, 2001).

\textsuperscript{189} For example the term national park (parque nacional) first appeared in legislation in 1945. This prohibited forest exploitation for 200m on either side of the Pan-American Highway, and declared part of the remaining construction area as a national park (UNEP-WCMC, 1992; Hopkins, 1995).
country's natural resources were diminishing at an alarming rate, during the 1970s the government took steps to try and protect its national heritage and between 1970-71 Costa Rica's first four national parks were created (Weaver, 1998). Over the ensuing decades, the total area of land under protection expanded from 3% to the current level of over 25% of the country's land area today and comprises 26 national parks, 8 biological reserves, 65 wildlife refuges, 11 forest reserves, 32 buffer zones, 15 wetlands and 12 other categories (see figure 7.2) (GEF, 2006; Sancho, 2001). In addition to these numbers there are over 55,000 ha in 10 private reserves and over 32,000 ha in 21 indigenous territories.

Figure 7.2 - Protected Areas in Costa Rica

Adapted from MINAE (2003)
The creation of the national park system in Costa Rica, however, has not been without its problems. Firstly, although the number of protected areas that has been created may seem impressive, the system itself has not prevented the depletion of natural areas outside the ones that are protected, which have subsequently become subject to some of the fastest rates of deforestation in the world (Minca and Linda, 2000). Secondly, by the mid 1980s when the economic crisis that hit Costa Rica and the whole region was at its height, the national park system, after its initial expansion, went into a period of decline. As a result of suspending its debt service payments in 1981, Costa Rica was forced to adopt USAID, World Bank and IMF structural adjustment programmes (see chapter 3), which subsequently reduced government spending. As discussed in sections 6.6 and 7.2, these neoliberal reforms have often diverted money away from environmental ministries leaving them very little capacity or resources to effectively implement environmental laws and policies. Ironically, this cut in government spending also came at a time when increasing international pressure for environmental sustainability challenged the country's somewhat destructive agrarian policies; policies which the neoliberal model encouraged (Nygren, 1998).

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190 Between 1989 and 1992, economic problems in Costa Rica resulted in a 50% reduction in government funding for the national park system (Epler Wood, 1993)
Table 7.1- Environmental Laws Passed and Conventions Ratified by Costa Rica

1963: Cabo Blanco Island protected area established
1990: Law of Creation of the Ministry of Natural Resources and Mines (MIRENEM).
1992: Convention on Biological Diversity
1994: Changes to article 50 of the political constitution of the republic: the environmental right of a healthy and ecologically balanced environment, and article 46: the consumers and users have the right to the protection of a healthy environment.
1994: The creation of SINAC.
1995: MIRENEM changed its name to the Ministry of the Environment and Energy (MINAE). The growth of the National Technical Secretary of the Environment (SETENA).
1996: Forestry Law, the establishment of the Environmental Services scheme and the growth of the National Fund for Forestry Financing (FONAFIFO).
1998: Biodiversity Law

Sources: Acuna (2002); Mendoza et al. (1996)

By the mid 1980s, insufficient human and economic resources meant that the four government agencies managing the protected areas system - the Forestry Service, the National Indian Affairs Commission, the Wildlife Service and the National Parks Service - were lacking the capacity to coordinate amongst themselves and implement proper protection. Furthermore, as result of there being no budgetary allowances, it was becoming more difficult to purchase land or to reimburse landowners\(^{191}\) (Vaughan et al., ND; Umaña and Brandon, 1992). Even today the Costa Rican government is still paying compensation to landowners of areas incorporated into the national parks. When interviewed for this research Guillermo Mora\(^{192}\), the head of National System of Conservation Areas (SINAC - a body of the current Ministry of the Environment in Costa Rica, MINAE - see below), revealed that “SINAC are not creating anymore national parks, as we are

\(^{191}\) In some cases, this lack of funds resulted in paying back landowners 20 years after a national park had been declared as was the case for Cahuita National park on the Caribbean coast (Umaña and Brandon, 1992).

\(^{192}\) Guillermo Mora, SINAC – Interview held in Costa Rica on 8\textsuperscript{th} December 2004
trying to consolidate them and pay back the land”. According to Umaña and Brandon (1992; 86),

“the lack of prompt settlement for expropriated lands created high levels of mistrust toward park officials and resentment of government policies in much of the country”.

At the same time an overabundance of legislation and institutions in wildland management posed problems in defining institutional jurisdiction and priorities resulting in inefficient and uncoordinated management (Vaughan et al., ND; Vaughan and Rodriguez, 1997).

However, in 1986, one month after Oscar Arias became president for the first time, the protected areas system was partially revitalised with the creation of the Ministry of Natural Resources, Energy and Mines (MIRENEM). MIRENEM was specifically responsible for the formulation of national policies and the development of an institutional framework that would be adequate for the protection of the country’s natural resources and use (Sancho, 2001; Ugalde, 1992). This, according to Vaughan et al. (ND), gave natural resource management for the first time in Costa Rican history “legal equality with other economic and social governmental factors”. The late 1980s, therefore, saw a strong greening of development discourse (Nygren, 1998). With the Arias administration keen to slow deforestation rates in the country and improve park management at the same time as providing economic benefits to local populations, emphasis was placed on giving meaning to the rhetoric of sustainable development. According to Umaña and Brandon (1992; 89) “this meant developing a link between absolutely protected government held-lands (12% of the country) and privately held protected areas (15%)”. In this way, it was hoped that if options were provided for people to sustain themselves in the buffer zones around protected areas then they would stop destroying forests. At the policy level MIRENEM developed three key strategies to try and protect the nation’s natural resources: (1) define and carry out a national strategy for sustainable development highlighting the role of renewable resources and biological diversity; (2) promote the use of biological diversity as a
key management objective; (3) encourage an integrated approach to the management of protected areas and buffer zones (Umaña and Brandon, 1992).

In order to fulfil the first objective, in 1988 MIRENEM launched the first National Conservation Strategy for Sustainable Development (ECODES), which marked a significant advance in government policies for natural resources protection. By incorporating environmental sustainability concepts into national development policies, ECODES was the first effort at the national level to link conservation and development (Quesada, 1990; Conservation Finance, 2003). According to Mendoza et al. (1996; 39) ECODES “was both a response to the growing concern about threats to the environment and a timely reply to international calls for sustainable development”. ECODES, at that time, was considered by governmental institutions to be the blueprint for future sustainable conservation efforts within Costa Rica and helped to establish guidelines and indeed a reference framework towards achieving these efforts. However, lacking the financial backing to support it, ECODES, was never actually officially adopted as a political strategy and today it no longer seems to be the guiding document for Costa Rica’s national conservation activities (IISD, 2004; Mendoza et al., 1996; Conservation Finance, 2003). A high possibility for this lack of funding for implementing ECODES was the austerity imposed by the neoliberal reforms of the period which acted to divert resources away from the state sector (including environmental ministries), as well as the changing priorities of the Costa Rican government itself which had started to embrace more of a neoliberal outlook at that time (these changing priorities of regional governments are discussed in more detail in relation to the changing nature of the MBC in section 5.3.1). The lack of government funding and institutional commitment for implementing this national strategy has lead to activities becoming less cohesive and more devolved over the intervening years. This devolution into different policy areas has occurred in the form of the establishment of several separate national strategies that relate to sustainable development such as; the biodiversity strategy; biological corridor, Law 7779 on use and management of soil conservation, the National Plan of Environmental Policy and the National Plan to reduce poverty (Guzman and Birch, 2002 cited in IISD, 2004).
To aid the accomplishment of the second two objectives of the Arias administration, emphasis was placed on creating an integrated approach towards wildland management (Vaughan *et al.*, ND; Vaughan and Rodriguez, 1997). MIRENEM, towards the end of the 1980s, in an attempt to better coordinate conservation activities, proposed the re-structuring of the entire protected area system; the National System of Conservation Areas (SINAC) (UNEP-WCMC, 1992). Having gone through several stages of construction and institutional coordination, it was not until June 1995, during the Figueres administration (1994–1998) that SINAC\(^{193}\) was officially implemented in Costa Rica (SINAC, 2006). SINAC was devised as a decentralised and participatory institutional system to

“regionally consolidate protected area conservation and management, paying special attention to biodiversity inventories, minimum population sizes, restoration ecology and long term monitoring while satisfying the socio-economic needs of surrounding communities, and account for other national and international interests” (MIRENEM, 1991).

One of the most important steps towards the implementation of SINAC was the merging of four government agencies in late 1995 (the Forestry Service, the National Indian Affairs Commission, the Wildlife Service and the National Parks Service) enabling the improved facilitation of “national planning and executive processes directed towards sustainable natural resources management” (Vaughan and Rodriguez, 1997). SINAC, as the next section goes on to discuss, has been one the most important institutional milestones that has contributed towards the implementation of the MBC in Costa Rica.

With the renaming of MIRENEM in 1995 to the Ministry of Environment and Energy (MINAE) under the Environmental Organic Law\(^{194}\) (Ley Orgánica del Ambiente), SINAC now operates as an agency of this Ministry (Sancho, 2001). Indeed, the consolidation of SINAC has been MINAE’s main objective. According

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\(^{193}\) As mentioned earlier, although ECODES was not adopted as a broader national planning approach for sustainable development as a working basis for environmental decisions, the actual existence of SINAC represents one of the national programmes compatible with the ECODES guidelines.

\(^{194}\) This law gives a legal content to the new constitutional principle, establishing the leading authority of the MINAE in the environmental field, the obligation to conduct environmental impact studies in all development projects, as well as a Technical Department to regulate and approve those studies. The new law also creates participatory mechanisms and entities to facilitate local and regional participation on issues related to management of natural resources (MINAE-UNDP, 2002).
to Alvaro Ulgade, one of Costa Rica’s pioneering biologists, SINAC’s creation, “has had a significant impact on the protected areas and has stopped the feud between parks and forestry operations as it is now one institution”. One of the keystones of SINAC has been the promotion of the sustainable use of natural resources in Costa Rica with the aim of contributing to the life quality of the country’s inhabitants (INBio, 2003; MINAE, 2000). In order to put this into practice, the whole country has been decentralised and divided into 11 conservation areas (see figure 7.3); groups of clustered wildlands or territorial units (state protected areas, private property and urban zones).

**Figure 7.3 - Conservation Areas Costa Rica**

![Conservation Areas Costa Rica](image)

Adapted from Conservation Finance (2003)
These units are all managed under similar national strategies, where private, and government related activities interrelate in fields such as the use and conservation of natural resources (Inbio, 2003). The implementation of SINAC, during the Figueres administration was one of the many strategies that were adopted as part of an attempt to raise the environmental profile of Costa Rica. Inspired by the philosophies and proposals of ECODES developed under the Arias administration and more recently in Agenda 21, the Figueres administration adopted the idea of sustainable development as the guideline for development policies. These policies included; raising environmental rights to constitutional status, land-use planning, limitation of the agricultural sector’s impact, regulation on CO₂ emissions, the creation of citizen participation forums and the creation of the National Coordinating Body for Sustainable Development (SINADES) (Mendoza et al., 1996). This body, made up of representatives from different sectors of the state and civil society, “monitors the application of policies and programmes” (UNEP-UNDP-Earth Council, 1994; 20) and “advises the central government on issues identified as being important to sustainable development” (UNDP-GEF, 1999; 13). Also through SINADES and with funds from the Global Environment Facility (GEF), the Advisory Commission on Biodiversity (COABIO) was established which is responsible for the preparation of the National Biodiversity Strategy (UNDP-GEF, 1999). Such institutional structures, and in particular SINAC, have provided a foundation upon which the Costa Rican section of the MBC can be built. However more recently, the Costa Rican state has demonstrated a shift towards the uptake of environmental policies that reflect more neoliberal ideologies e.g. the development of programs such as environmental services payments (PES) and bioprospection as well as the promotion of ecotourism which all intend to economically benefit from nature. This shift represents the consolidation of neoliberal processes within Costa Rica, which may become intensified under the now more neoliberal oriented MBC.

As discussed in section 7.2, the promotion of neoliberal reform within Central America and its subsequent impacts saw the rise of NGOs in the region, which have also played vital roles in the conservation of natural resources. However, whilst Costa Rica, unlike other Central American countries, experienced an earlier
emergence of a liberal democracy with attempts made by the welfare state to address the basic needs of more subordinate groups, there was less reason for politically independent organisations, such as NGOs, to arise (Macdonald, 1997). It was not until the economic crisis in the 1980s and the neoliberal attack on the state which followed that the NGO niche in Costa Rica expanded, with many regional NGOs now choosing to locate their headquarters in the country’s relatively stable and pleasant setting (Macdonald, 1997; Lara, 1995). Today, NGOs abound in Costa Rica, especially those with an environmental orientation. This movement in particular has played a vital role in monitoring the government and influencing key decision makers as well as lobbying for conservation efforts (Evans, 1999). Both Lara (1995) and Macdonald (1997) noted that in the mid 1990s NGOs did not serve as society’s safety net, as it was still the public sector that tried to fill this role. However as government sponsored welfare services have been reduced and privatisation has increased under neoliberal reforms over recent years (which are predicted to intensify under DR-CAFTA: see chapter 6) along with a shift towards more neoliberally orientated environmental policies, NGOs in Costa Rica are gradually taking on more of a prominent role. The next sections explore how both the state and NGOs have integrated themselves into the MBC initiative in Costa Rica and what conflicts, if any, have occurred amongst these actors.

7.4.1 Costa Rica and the MBC

Having outlined the environmental institutions and strategies within Costa Rica, this section explores how the MBC initiative has been implemented and embraced in the country. In Costa Rica, the main motivation of the MBC, according to the Costa Rican Ministry of the Environment, is to “promote the conservation and the sustainable use of biodiversity from a Mesoamerican perspective for the benefit of society” (MINAE -UNDP, 2002; 84). Each member country of the MBC has two objectives to carry out; one is to participate in the consolidation of the regional corridor and the second is to strengthen its own national corridor. To guide the implementation of the MBC in Costa Rica, the Costa Rican MBC National
Commission was established in 1999 as a consultation and advising body (CCAD-GTZ-UNDP-CBM-MINAE, ND). When speaking to Carlos Manuel Rodriguez, the Minister of MINAE, he asserted that “Costa Rica triggered the idea for the corridor” as back in 1994, the country had already started land-planning studies (proyectos GRUAS) identifying priority biological connectivity sites and actions to strengthen protected area wildlands. However it was not until 1999 that the Costa Rican section of the MBC was born. At present there are 39 biological corridor initiatives within Costa Rica with many based on the GRUAS study - 20 of these corridors are relatively developed whereas the rest are still in a proposal format (MINAE-UNDP, 2002). As discussed in the previous section, SINAC is the main driving force behind the Costa Rica section of the MBC (Acuna, 2002). The main function of SINAC, therefore, according to the PCCBM (the umbrella initiative of the MBC) is to strengthen the institutional capacity of the MBC contributing to “its technical and operational capacities in the form of counterpart personnel, vehicles, installations and communication systems” (UNDP-GEF, 1999; 36). This is to be achieved by placing emphasis on consolidating the existing national biological corridor programmes in Costa Rica by strengthening and increasing the responsibility of local organisations, developing strategic alliances with governmental institutions and NGOs and strengthening governmental and private protected areas (CCAD-GTZ-UNDP-CBM-MINAE, ND).

However, despite the presence of institutional structures in Costa Rica, such as SINAC, which provide the building blocks for the Costa Rica section of the MBC, these structures do not necessarily mean that effective conservation of the natural resources is taking place. For example, SINAC promotes the active participation of local communities within each conservation area, which according to Inbio (2005) is of “vital importance for the conservation and sustainable use of biodiversity at

195 The members of the MBC-CR National Commission are; the National Forestry Office (ONF), UNDP, WWF, Inbio, ACICAFOC, Ministry of Agriculture, Institute of Agrarian Development, Ministry of Public Education, Wildlife Conservation Society, Binational Committee Costa Rica-Canada, IUCN, Mesa Campesina, Mesa Indigena, SINAC-MINAE.
196 Carlos Manuel Rodriguez, Minister of MINAE - Interview held in Costa Rica on 12th November 2004
197 The GRUAS project is a land-planning project, directed by MINAE, for the conservation of biodiversity in Costa Rica. It has become the starting point for all initiatives to declare new protected areas or new biological corridors (FONAFIFO, ND).
the local, national and global level”. However, through conversations and interviews for this research with members of local communities around selected national parks in Costa Rica, it would seem that SINAC has done little to involve communities in decision-making processes and engage them in active local participation. One member of a community near Corcovado National Park in the Osa Conservation Area made this clear in an interview for this research in 2005 by suggesting that the “government does little to capacitate and educate us about the national park” 198. Moreover, Barbara Hartung199, a biologist from the Tortuguero Conservation Area, asserted that;

“there is no participation of the MBC at the local level and the local communities have nothing to do with conservation, they just work here and make a life from tourism”.

Interestingly, though, the governing institutions behind both the MBC, as part of the Social and Productive Component (see section 5.3.2) and the PPP, as part of the Indigenous Consultation and Project Design (ICP) of the IMDS (see section 6.6.1), are placing a lot of emphasis on improved participation and consultation with communities. However, as far as the author’s research is concerned, this improved grassroots participation and consultation seems to be particularly limited. Not only have these local communities not been engaged in any participation linked to the MBC through SINAC, but the majority of those that were interviewed had never even heard of the MBC. As Mario Garcia, a representative from Canadian NGO working in the Tortuguero Conservation Area pointed out, “the government of Costa Rica never even told people about the national park system”200 upon which the MBC is based. Indeed, this lack of consultation and participation has lead to some community members feeling rather bitter about the governing institutions behind Costa Rican national park system and indeed about the national park system as a whole. As Mario Garcia made clear “MINAE are more concerned about making money from tourists than engaging local communities

198 Lucas Solano, member of La Palma local community Osa Conservation Area – Interview held in Costa Rica on 6th March 2005
199 Barbara Hartung, Biologist Tortuguero National Park – Interview held in Costa Rica on 10th February 2005
200 Mario Garcia, COTERC Tortuguero National Park – Interview held in Costa Rica on February 8th 2005
and protecting the park”. Also, an interview with Tom Boylan201, an organic finca (small farm) owner in the Osa Conservation Area, revealed similar views to Sr. Garcia, asserting that;

“MINAE do a crap job running the park, they have no concept of what they are doing. They are not organised, they don’t have the manpower to protect their borders. It’s just a business.”

Not only do these comments suggest that the Costa Rican state are essentially selling nature to make a profit reflecting neoliberal ideologies of nature commodification, but they also underline the fact that MINAE are under sourced which prevents them from protecting the national park system effectively. With poor administration at the national level, therefore, the MBC, as pointed out by Dr Emma Harrison202 from Caribbean Conservation Corporation, has resulted in “being more of a paper park and it doesn’t correlate with what’s going on the ground. If the protection is not there, then it’s not working”. Building on the argument put forward in chapter 5, this comment demonstrates the breakdown in implementation and indeed communication between the top-down regional MBC and projects at the local level.

Not only does SINAC lack local participation, but also critics have argued that the system is still predominantly territorially centralised which does not encourage effective conservation of natural resources within the MBC. As discussed in section 7.4, SINAC promotes the fact that it operates in a decentralised manner and has split Costa Rica up into 11 conservation areas. However, according to Ferroukhi and Aguilar (2003; 186);

“one can speak of regionalizing, but not decentralising in SINAC’s case, as the regional offices are not autonomous. Although they have the capacity to make some decisions, they depend on SINAC’s supervision, located in San Jose”.

While SINAC may promote the fact that it is decentralised, as this point suggests, its lack of autonomy means that decisions and resources are still heavily influenced by the central government. This lack of autonomy, according to

201 Tom Boylan, Organic Finca Owner, Osa Conservation Area – Interview held in Costa Rica on 2nd March 205
202 Dr Emma Harrison, Biologist, CCC – Interview held in Costa Rica on 22nd October 2004
Ferroukhi and Aguilar (2003; 186), has caused SINAC “practical difficulties in consolidating key aspects of its functioning”. An interview with Edwin Calderon, a park ranger from the Tortuguero Conservation Area, revealed:

“the money from the national parks goes straight into the central government fund (la caja unica) not to MINAE. Only 6% actually comes back from San Jose and we need at least 30% to be able to protect this national park”.

Furthermore, with the national policy in favour of reducing state bureaucracy and the national internal debt, MINAE and SINAC’s budgets are decreasing (Sancho, 2001), which could make the situation for the national park system worse, and create difficulties for the effective implementation of the MBC at the national level. According to Utting (1994; 244) “many state agencies simply do not have the budgets or personnel necessary to fulfil basic obligations”. This budget deficiency was made clear in an interview with the Minister of MINAE in Costa Rica, Carlos Manuel Rodriguez, who stated that “MINAE lack resources. I feel very frustrated as I am very clear what to do with this country but I cannot achieve it”. This lack of resources is essentially a resultant factor of the downsizing of the state through neoliberal reform combined with the changing priorities of the central Costa Rican government. Such factors have channelled funds away from the environmental ministry.

With neoliberal reform downsizing the state and cutting government spending, along with regional government’s changing priorities (which can be demonstrated by the changing nature of the MBC initiative itself), environmental ministries, as discussed in section 7.4, have started to place emphasis on developing and introducing new financing mechanisms that aim to utilise nature to generate funds. Perhaps the most well-known programme is the environmental services payments programme (PES) which, initiated by the government in 1995 and backed by the UNDP’s Capacity 21, is an “economic recognition paid by the Costa Rican government to the owners of forests and forest plantations as a

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203 Edwin Calderon, Park Ranger Tortuguero National Park – Interview held in Costa Rica on 11th February 2005
204 SINAC makes around 1000 million colones (almost US $2 million) every year, but only half of this money makes it back to SINAC in the form of a budget (Sancho, 2001).
205 Capacity 21 is an initiative which seeks to implement the recommendations of Agenda 21 at the local scale (see appendix) drawn up at Rio (UNEP-UNDP-Earth Council, 1994).
compensation for the environmental services they provide" such as the mitigation of gases, water, wood, scenic beauty etc" (MINAE- Oficina Nacional Forestal-UNDP, 2002; 38). In 2001, the GEF and the World Bank initiated the Ecomarkets Project to expand and refine the environmental services payments programme. The main thrust behind the Costa Rican Ecomarkets Project is to increase forest conservation outside protected areas in the MBC "by supporting the development of markets and private sector providers for environmental services supplied by privately owned forests including protection of biological diversity, greenhouse gas mitigation, and provision of hydrological services" (World Bank, 2006). Also along these lines of economic incentives, the debt-for-nature swap scheme set up in the early 1990s in Costa Rica is "a mechanism through which unpaid portions of debt are purchased at real market value by conservation organisations and in exchange for cancelling the debt, governments agree to support conservation programmes" ( Vaughan, 1994; 400). Another focus that the Costa Rican government has been concentrating on in order to gain more funds is utilising the natural wealth of Costa Rica to not only position itself innovatively as an eco-tourist destination but also to encourage bioprospection programmes that are lead by Inbio\(^{206}\) (Zamora and Obando, 2001).

Reflecting the neoliberal ideologies of nature commodification and market environmentalism put forward in chapter 2, these programmes essentially view nature as a product, which can be bought or sold to make a profit rather than anything with an intrinsic value. In this way, and as a result of the changing nature of the MBC at the regional level, (see chapter 5), the move towards such strategies demonstrates how the consolidation of the MBC at the national level has perhaps allowed for an intensification of neoliberalisation of Costa Rican environmental policy. Indeed, the promotion of such neoliberal orientated strategies has generated considerable controversy both within and outside of Costa Rica on ethical as well as technical grounds (Stonich, 1999). The environmental services payments programme (PES), for example, has been

\(^{206}\) Costa Rica's National Biodiversity Institute (INBio) is a non-profit environmental research organisation which was created in 1989 to show "how biodiversity can become a pillar of economic, cultural and social development". The institute promotes the fact that we must save biodiversity so that we can get to know it and put it to sustainable uses that lead to socio-economic development (Umaha, 2002).
criticised for offering not only “perverse incentives to land users” but also for “displacing environmental problems or unsustainable land uses to outside areas” (Mayrand and Paquin, 2004; 34). It has also been argued that PES programs are more often than not executed without proper monitoring or control mechanisms, are highly dependable upon external financial resources and their activities are poorly disseminated amongst the local population. In many cases therefore, as Pfaff et al. (2006) argue it has been found that “Costa Rica’s payments for environmental services program has had little impact on deforestation rates”. Debt-for-nature swap programmes have also been questioned for favouring environmental interests over social interests with governments setting aside land for protection and not taking resident communities into account. Indeed critics have also expressed concern that the swaps provide the means by which developed countries are able to impose their northern values and infringe on national sovereignty (Stonich, 1999; Ruiz-Marrero, 2003). As Elliot (1994; 56) argues;

“there is a danger that priorities in resource use within developing countries will be set aside by outsiders, prompting fears of neo-colonialism on behalf of debtor nations”.

As discussed in chapter 6, the bioprospection programmes that Inbio has contracted with over 30 MNCs (with mostly pharmaceutical companies) to make biodiversity conservation profitable, have been particularly contentious and have raised a number of issues related to bio-piracy and intellectual property rights. Indeed, initiatives such as DR-CAFTA and the PPP, by encouraging privatisation of natural resources and facilitating companies to legally claim ownership over the knowledge of plants under the signing of DR-CAFTA, could intensify this “theft of biodiversity” and ensure increased corporate expansion throughout the region. However, although this idea of nature commodification may be controversial to some, other neoliberally orientated actors, such as the World Bank, outside governments and MNCs, have praised Costa Rica’s achievements in developing a successful conservation model that is in harmony with corporate interests and embodies their idea of sustainable development (see chapter 2) (Ruiz-Marrero, 2003). Nevertheless, the conclusion that can be reached from the assessment of the
data gathered during the course of this research is that the Costa Rican model fails to address the economic, social and political roots of the environmental problems within the country and ignores the contradictions between its current development model and its apparent conservation agenda. As Stonich (1999) points out, the Costa Rican model and the much touted ringleader of the MBC initiative

“has resulted in a spatial mosaic of small, disarticulated islands of preservation (the protected areas) surrounded by vast areas of environmental degradation brought about by continued economic development initiatives that are environmentally unsound”.

It can be said therefore, that within the context of the MBC, the Costa Rican state, by promoting the idea of economising nature through its more recent financing mechanisms, has integrated itself into the MBC initiative in a particularly neoliberal manner. In this way, as the example from Costa Rica demonstrates, the MBC at the national level, rather than attending to the needs of the country’s people and the environment, is merely satisfying the whims of the IFIs and neoliberal governments and the corporate interests of MNCs. With the Costa Rican model being the region’s leader in conservation and the role model for the MBC, the fact that the model has failed from so many angles would suggest that the MBC at the national level and from a state perspective has been a potential failure. However, this does not mean that there is no hope for the prospects for other interpretations of sustainable development to be articulated in the region. Although relatively minor in their contribution at the regional level, the NGO movement and the coming together of civil society at the national and local levels reflect the original more interventionary interpretations of sustainability that used to drive the MBC before the shift into the neoliberal paradigm. By analysing the NGO movement in Costa Rica, the next section explores both the articulation of alternative views of sustainable development in Costa Rica as well as those more mainstream interpretations of the concept which have also been adopted by some NGOs.
7.4.2 Costa Rican NGOs and the MBC

We have already seen in chapter five (section 5.4) that many of the NGOs involved in sustainable development and environmental conservation in the region have been highly suspicious of the way the MBC has been implemented at the regional and indeed at the national level, particularly as the initiative has moved in more of a neoliberal direction over the past few years. These suspicions were highlighted in discussions concerning the regional impacts of the MBC. Indeed at the national level, as the author’s interviews revealed, many environmental NGOs in Costa Rica have become more frustrated with MINAE as effective delivery agents and indeed as effective implementers of the MBC. For example, interviews with representatives of NGOs that operate in Costa Rica revealed the view that not only do MINAE have “budget problems and lack administration” but also “no one listens to the Minister and they don’t have an effective agenda for the future.” Felipe Vega from JUNAFORCA (Junta Nacional Forestal Campesina) an organisation in Costa Rica that represents campesinos, also agrees with this view, saying that “the Minister of MINAE is not clear or logical and they have no concept of what they are doing. MINAE work more like a policeman rather than a facilitator.” As already discussed in section 7.4.1, MINAE’s lack of resources is making consolidation of the country’s national park system - the system upon which the MBC in Costa Rica is based - difficult. These incapacities of MINAE have lead some NGOs, especially those that operate at the grassroots level (e.g. Fundacion Neotropica, JUNAFORCA) to initiate their own projects, which, whilst they may not follow or fulfil the objectives of the actual conceptual side of the MBC, can still be found within the geographical location of the corridor. Although some of these NGOs have not been engaging and collaborating with the regional MBC initiative, the fact they are developing their own projects that have a strong social and environmental focus, perhaps suggests how these NGOs may be representing the continuation of the original more interventionary emphases of the MBC project explored in chapter 5 (section 5.2). In this way, the fact that this

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207 Diana Juskovsky, Director Rainforest Alliance - Telephone Interview held in Costa Rica on 12th December 2004.
208 Vera Varela, Director Fundacion Neotropica - Interview held in Costa Rica on 6th December 2004.
209 Felipe Vega, Director JUNAFORCA - Interview held in Costa Rica on 6th December 2004.
interventionary emphasis still exists at the more grassroots level, could also suggest the existence of tensions in the direction of the MBC between those funding and perhaps managing the regional initiative and those in charge with the implementation of the smaller projects which are brought together under its banner. Despite the existence of such tensions, the fact still remains that the NGO sector is a central part of MBC local level implementation.

However, as discussed in chapter 3 (section 3.4) and also at the beginning of this chapter, the existence of different types of NGOs means that there are some NGOs, particularly those operating at the national and indeed regional levels (e.g. WWF, Conservation International etc), that are more prepared or indeed are obliged to collaborate with the Costa Rican state depending on their priorities and the sets of issues they are working on. This has particularly been the case with larger international NGOs who are closely tied to the major institutions funding the whole MBC project. However, although debates have arisen as to the potential negative influences of these external funding sources on the types of activities carried about by the larger Costa Rican NGOs (see section 7.2 of this chapter), the collaboration of the NGOs with the national state does not necessarily have to have negative impacts. Indeed, in Costa Rica, there are examples of successful small-scale corridor initiatives that are managed by NGOs in collaboration with the MINAE and that are a part of the national MBC e.g. the Talamanca-Caribbean Biological Corridor, the Biological Corridor of Montes de Aguacate as well as the Osa Biological Corridor. These more grassroots initiatives work closely with local communities to not only encourage livelihoods that favour conservation and the rational use of resources but also to improve the socio-economic status of the local inhabitants by providing sustainable development alternatives e.g. the development of organic cacao and coffee which are exported to US and European markets (Jukofsky and Murillo, 2002; CBMA, ND; Ankerson et al., 2006). This demonstrates how if NGOs and the state do work together, there can be positive outcomes, particularly in situations where the ministries of the state lack the resources to effectively implement their own policies. Having explored in more detail the environmental institutional structures in Costa Rica and how they relate to the MBC and other autonomous political movements in the country, the next
section will look at the Nicaraguan case study to see how institutionally it compares with Costa Rica in the context of the environment and how well it has immersed itself into the MBC.

7.5 Background to Nicaragua’s Environmental Institutional Structures and Strategies

Although Nicaragua may not have had the political stability to develop environmental institutional structures and strategies as much as its southerly neighbour, the country’s environmental movement did have a promising start. Like Costa Rica, Nicaragua signed the Convention for the Protection of Flower, Fauna and the Natural Science Beauties of the Countries of America in 1942 (UNEP-WCMC, 1992). Then, in 1958, Nicaragua created its first wildlife refuge of the Peninsula of Cosigüina and its first national park in 1971 (see table 7.2 below) (SINAP, 2005). However, a lack of institutional capacity and supportive national policies meant that these “paper parks” were relatively ineffective (Anon, 1989). Little attention, therefore, was paid to nature preservation until the 1970s, when, as a result of growing environmental concern, the state began to form entities or departments concerned with environmental issues (Wieberdink and van Ketel, 1988).

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210 Bizarrely, prior to the revolution, these first protected areas in the absence of an environmental ministry or agency were assigned to the Central Bank (Banco Central) to look after (Anon, 1989; Harthorn & Green, 1985)

211 Nicaragua has found that declaring new protected areas is far easier than the costly act of actually protecting and managing them. This has therefore resulted in a growing number of “paper parks”, which show up on maps, but are protected areas by name only (Juksfsky & Bolaos, 2002).
Table 7.2 Environmental Laws Passed and Conventions Ratified by Nicaragua

1958: Peninsula of Cosigüina wildlife refuge established
1971: Cerro Saslaya National Park established
1972: Convention concerning the Protection of the World Cultural and Natural Heritage
1979: Law of Creation of IRENA
1980: Creation of National Parks Service
1990: Launch of Forestry Action Plan (PAFNIC)
1992: Preparation of Environmental Action Plan (PAANIC)
1992: Convention on Biological Diversity
1992: Central American Biodiversity Convention
1994: Transformation of IRENA to MARENA
1995: Strategy of the Conservation of Biodiversity formulated (ECOBIO)
1996: Creation of SINAP
1996: Law of Environment
1999: Publication of Nicaragua’s biodiversity report

Compiled from: SINAP (2005); Serrano and Salas (1996); MARENA-UNDP (1999)

Following the 1979 revolution, the new Sandinista government, in pursuit of drastically changing the national policy, founded the first Institute for Natural Resources and the Environment (IRENA), which became responsible for managing and protecting the country’s natural resources as well as having the authority to recommend new environmental legislation (Wieberdink and van Ketel, 1988; Larson, 2001; UNEP-WCMC, 1992). Within IRENA, the National Parks Service was then created by decree as the technical division of the national park system (Cedeno et al., 1992). At the beginning of the 1980s, IRENA started the development of a network of protected areas across the country called the National System of Protected Wildlands (Sistema Nacional de Areas Silvestres Protegidas) (SINASIP). This allowed for the identification of key priority areas, the design of a management category system along with the collection of new information to help with the formulation of protected area legislation. In 1983 SINASIP declared 17 protected areas in the Pacific covering 1.1% of the national territory (Anon, 1989). As Hawkesworth (1999; 6) points out;

"the early years of the revolution provided great opportunities and advances in environmental protection; deforestation levels were reduced, national parks
were designated, environmental education was introduced into schools, levels of pesticide poisonings fell dramatically and significantly the state appeared to be moving towards a development strategy that would include the environment as a core element”.

However, similarly to Costa Rica, but for different reasons, Nicaragua experienced a lull in its environmental movement during the mid 1980s and much of its environment programme was abandoned (Hawkesworth, 1999). One of the reasons according to Faber (1993; 162) was that “the contra war [1982 -1990] had militarised the wilderness” which resulted in IRENA only being able to protect 1.6% of Nicaragua’s territory. Others argue, however, that the war may have relieved pressure on natural resources as the extensive production systems under latifundistas as well as campesino migration literally came to a halt, with many areas being designated as off limit war zones (Saalismaa, 2000; Nietschmann, 1990; Weaver, 1998). As counterrevolutionary war deepened and economic difficulties grew during the 1980s, environmental problems according to Larson (2001; 142) “were not a priority concern, nor were they integrated into the overall conception of economic development for the country”. This point was also reiterated in an interview held with the ex minister of the environment (1990- 1994), Jaime Incer, who explained that “during the political turmoil there was no thought for protection”. Not only was the state failing to support the country’s newly defined environmental strategies but also it became more difficult for the state to engage the rural populace in participating in the environmental programme (Hawkesworth, 1999). At the same time, in 1985, Nicaragua was subjected to a US imposed economic blockade and international assistance for conservation activities was severely limited. By the late 1980s, IRENA had suffered an 85% cut in staff and had been demoted to a sub unit under the Ministry of Agriculture and Agrarian Reform (Ministerio de Agricultura y Reforma Agraria) (Nietschmann, 1990). Nonetheless, although the 1980s was considered in many cases to be ‘the lost decade’, environmental awareness, thanks to the creation of IRENA by the Sandinista government, had started to grow, which was also coupled with the strengthening of the nation’s first few environmental NGOs (Larson, 2001).
By 1990, and with the war behind them, Nicaragua’s institutional environmental movement entered a new phase. Even though they were not particularly high on the national agenda, environmental concerns had been given a high profile in the media and even in government discourse, with both Daniel Ortega, the president at the time (in office between 1985 and 1990) and the opposition candidate, Violeta Chamorro, including the concept of ‘green politics’ in their campaign speeches (Larson, 2001). With Chamorro’s victory in 1990, it seemed that the environment had been placed squarely on her agenda, especially after the Earth Summit in Rio in 1992 when Nicaragua not only ratified the Convention on Climate Changes, Biological Diversity, Desertification, Toxic Waste and Protection of the Ozone layer etc but also presented one of Latin Americas most progressive environmental planning documents – the National Conservation Strategy for Sustainable Development (Larson, 2001). Closer to home Nicaragua had also signed the agreements established within the framework of the Central American Alliance for Sustainable Development (ALIDES) in 1994 (see chapter 3 section 3.4) (Earth Council, 1999). At the same time IRENA was elevated to a Ministry changing its name to MARENA (Ministerio del Ambiente y Los Recursos Naturales de Nicaragua). The early 1990s also saw the preparation of Nicaragua’s Forestry Action Plan (PAFNIC) and Environmental Action Plan (PAANIC) and in 1995 the Strategy of the Conservation of Biodiversity was formulated (ECOBIO) (MARENA-UNDP, 1999; Serrano and Salas, 1996). According to Larson (2001; 143) however, although, these commitments had been made by the government

“in practice, little changed, and in many ways, with the re-opening of a free market, massive unemployment and surging poverty, Nicaragua’s natural resources were more vulnerable than ever before”.

Despite the fact that the profile of the environment may have been raised, the need to pay back external debt with foreign capital lead Chamorro’s government to concentrate on the redirection of Nicaragua’s economic policies and guided by the Structural Adjustment Programs promoted by the IMF and World Bank (chapter 3 section 3.2.2). In pursuit of the neoliberal development model therefore, exports were promoted, major sectors of the economy were privatised, incentives were created for foreign investment and programmes were fostered that were geared
towards commercialisation of under-exploited natural resources including forests, fisheries and mines (Castilleja, 1993; Nicanet, 2006). In this way, activities such as deregulated trade and the creation of export incentives, which are designed to encourage foreign capital investment in resources exploitation, have actually discouraged activities such as sustainable forest management (Barany et al., 2001). For example the enforcement of environmental standards has been compromised as resource extraction concessions have been granted to foreign logging and mining companies. These problems have gradually intensified as the continuing pressures on state budgets exerted by the neoliberal reform process have meant there have been fewer financial resources\textsuperscript{212} available for environmental programs and enforcement (Nicanet, Nd; Barrow and Fabricius, 2002). Also, to make matters worse, Chamorro’s government policies re-channelled power and resources back into the hands of the traditional agricultural elite, a process which does not encourage the development of national strategies for environmental protection (Hawkesworth, 1999). Whilst the traditional agricultural elites and political elites in Nicaragua continue to fuel their profit making interests, with little or no concern for the environment or its people, the unequal distribution of resources and power has meant that “so far there has been a failure to introduce environmental practices in Nicaragua” (Hawkesworth, 1999; 17). Pooled together therefore, these problems within Nicaragua have certainly hindered any attempts at environmental change. However, despite such setbacks, environmental policies have still been drawn up and, within the context of the MBC, many national parks and protected areas have been created, albeit the majority of them being paper parks\textsuperscript{213} (see next section).

At the same time, NGOs today in Nicaragua have also taken on a prominent role and are attempting to address and indeed challenge the failure of the state to effectively implement environmental practices within the country. However, unlike Costa Rica, Nicaraguan Civil society (and with it the emerging NGO sector)

\textsuperscript{212} The IMF’s demands to reduce government spending led to MARENA’s budget being cut by 26 percent in 1997 (Friends of the Earth, 1999).

\textsuperscript{213} The limited financial resources available for protected area management, has, in some cases, lead to protected areas being designated by law, but managers are not hired, boundaries are not demarcated, and management plans do not exist—the park exists only on the paper that designated its legal status (Mogelgaard, 2006).
was barely allowed to exist let alone evolve in Nicaragua during the long years of
the Somoza dynasty (Macdonald, 1997). Nevertheless, in the 1970s, NGOs started
to become a lot more mobilised in conjunction with the social forces unleashed by
the revolution. With the prevalence of more serious social conditions in
Nicaragua, NGOs took on a different role than the NGOs that had developed in
Costa Rica focusing more on social issues than environmental issues. Furthermore,
as a result of factors such as the impacts of the US trade embargo and a leftist
revolution, these post revolutionary NGOs were able to develop in more of a
heterogeneous manner than in Costa Rica. With the state goals and NGO goals
coinciding, NGOs favoured the new government rather than opposed it
(Macdonald, 1997). However, since the defeat of the Sandinistas in the elections of
1990, the role of NGOs in Nicaragua has shifted more towards cushioning the
impacts of the neoliberal policies implemented by successive right wing
governments intent on pursuing the neoliberal model of development. The next
section moves on to explore how Nicaragua has tried to integrate itself into the
MBC, how well it has been implemented and how the NGOs in this country have
embraced the initiative.

7.5.1 Nicaragua and the MBC

Perhaps one of the more important creations related to the MBC initiative which
builds on IRENA’s earlier initiative SINASIP (see section above) was the creation
of the National System of protected Areas (SINAP) in 1996, which is similar to
Costa Rica’s SINAC (see figure 7.4). SINAP is made up of 76 designated protected
areas in 9 different categories encompassing 18% of Nicaraguan territory
(approximately 2 million hectares), although it should be pointed out that many of
these protected areas have already lost 50% of their forest cover (Juksfsky and
Bolaos, 2002; MARENA, 2004; Weaver et al., 2003).
Unlike Costa Rica, where the MBC runs down both the Atlantic and Caribbean sides of the country, in Nicaragua the MBC is mostly concentrated in the Caribbean region, which, due to lack of access still has relatively high forest cover (WWF, 2001). Covering 4.3 million hectares from the Honduran border south to the San Juan River which marks the boundary with Costa Rica, the coastal region, located in the autonomous regions\textsuperscript{214} of Nicaragua, contains the largest tract of undisturbed tropical humid forest, providing for a better functioning corridor.

\textsuperscript{214} In 1987 the Atlantic Coast Regional Autonomy Law established two separate autonomous regions (RAAN and RAAS) each with its own multi-ethnic governments (CRAAN and CRAAS) and gave those governments substantial authority over their affairs (Kaimowitz et al., 2003).
than the more fragmented habitats of the Pacific region\textsuperscript{215}. In 1997, at the time the
corridor was launched, Nicaragua, according to a MARENA representative,
committed itself “to protect, monitor and plan and develop the region and
undertake an information campaign on the local, regional and international level
to respect the corridor and its priority areas” (Rainforest Alliance, 1997). In order
to take steps to safeguard the MBC, the World Bank gave a $7.1 million grant to
the Nicaraguan government which was used to set up the MARENA-run Atlantic
Biological Corridor (CBA) project, where attention has been directed towards the
conservation and sustainable use of the natural resources of the country’s most
pristine natural areas such as Bosawas in the north-east of the country and Indio-
Maiz in the southeast as well as the involvement of indigenous communities who
inhabit the areas (CCAD-World Bank, ND; Rainforest Alliance, 1997). Whilst
successive Nicaraguan governments have proclaimed support for the MBC
initiative in their country, government policy has frequently seemed to evolve in
contradictory directions. For example, President Arnoldo Alemán (1996- 2001)
gave strong verbal support to the CBA project, but, keeping in line with many of
his predecessor’s policies, “his administration continued to endorse myriad
extractive resources investments that generated strong opposition from
environmental groups\textsuperscript{216}” (Larson, 2001; 144). So while the Nicaraguan state was
continuing to proclaim its support for major environmental policy initiatives in
pursuit of sustainable development, the same state was issuing extensive forest
logging and mining concessions, promoting the expansion and intensification of
agro-export production, supporting wide-spread use of chemical pesticides and
failing to enforce its own environmental laws (Hawkesworth, 1999). This may be
one of the reasons why today, according to Maria Abaumza\textsuperscript{217}, the director of the
CBA at MARENA, despite the fact that the CBA has had some successes,

\textsuperscript{215} With more economic activity, including intensive agriculture and cattle ranching, and with a higher
population density than the Caribbean region, the Pacific region is considered to be the most environmentally
degraded area of Nicaragua (Anon, 1989; Cedeno et al., 1992).

\textsuperscript{216} In 1996, the Nicaraguan government granted a forestry concession to a South Korean company called Sol
del Caribe which was planning to log 62, 000 hectares in the Caribbean zone and manufacture plywood for
export which would essentially destroy a large part of the Nicaraguan section of the MBC (Rainforest
Alliance 1997). Concessions were also granted to Equipe Enterprises, Solcarza and Madensa (Larson, 2001).
The Aleman government too has also been linked to one of the dry canal proposal SIT-Global which, if built,
would carve into this particular section of the corridor (Nicanet, NDb).

\textsuperscript{217} Maria Abaumza, CBA Director, MARENA – Interview held in Nicaragua on 11th May 2005.
especially through increasing levels of local participation, “natural resources are still being depleted as people at the regional level are destroying the lands through concessions rather than the local people.” Sra Abaumza also lamented a worrying lack of support from the MBC regional initiative by complaining that:

“The CBA is not part of the MBC campaign, and in order for it to work we have to be part of it. There is no communication and they never consult us. It’s all too political and it’s too top down.”

It is interesting to note that the CBA office is situated at the same site as the MBC regional head office at the offices of MARENA in Managua, Nicaragua. So, if the MBC regional project is unable to collaborate successfully with a national governmental project located in the offices right next door, then there must be severe question-marks over how there can be any successful coordination between the MBC and other parties, governmental or non-governmental at national level, let alone regional and global.

The implementation of World Bank good governance programs in Nicaragua have tried to “promote local environmental protection, rural economic infrastructure, and technical and financial assistance for communal productive activities of the rural poor” (World Bank, 1999). Indeed, such programs have also aimed at the strengthening of MARENA as an institution as well as to initiate work that would support the Nicaraguan section of the MBC (Rainforest Alliance, 1997). However, information from the interviews conducted whilst in the field and from the literature suggest that such institutional strengthening has not been noticeable. As Jaime Incer\(^{218}\), the ex minister of MARENA (1990 - 1994) made clear;

“MARENA do not have enough resources to protect, they are not active in the field. The majority of support they do have stays in plans, research and discussion, and many of our parks are paper parks. This government have no idea about sustainability and they lack a long term vision.”

Sr Incer then continued to say that “MARENA has no rank in the government in Nicaragua” which suggests how weak the ministry actually is. Even in the UNDP-GEF (1999; 15) project document the Establishment of a Programme for the

\(^{218}\) Jaime Incer, Ex Minister of MARENA – Interview held in Nicaragua on 28\(^{th}\) April 2005.
Consolidation of the Mesoamerican Biological Corridor it was noted that “MARENA lacks technical and financial resources to manage all the areas officially declared as protected areas”. MARENA’s small budget, therefore, has affected the whole functionality of SINAP leaving most protected areas without adequate regulation and/or management (Sanchez, 1999). As Larson (2003; 115) points out “only 7 of these 76 protected areas are currently under any active management and 11 are considered under ‘minimum management’”. Also the protected areas have undefined boundaries that are not patrolled and forest guards are few and scattered (Weaver et al., 2003). According to Maria Rivas,219 the Director of Commerce and the Environment from MARENA, the ministry’s small budget means that “there are few personnel in the territories to do follow ups. That’s why we need to seek funds from international cooperation”. These personnel in charge of the parks are under equipped and also lack specialised training for protected area issues, such as legislation and management methods (Saalismaa, 2000). Not only does MARENA lack financial resources but it also lacks the capacity to oversee the management and indeed enforce the environmental laws within many protected areas, even though as Weaver et al. (2003; 9) argue “Nicaragua’s laws in general are adequate to protect biodiversity and to conserve natural resources”. Adolfo Valasquiz,220 a campesino from the Miraflor Reserve in Northern Nicaragua (one of the protected areas included in the Nicaraguan section of the MBC) stated, “the government does not even know about the existence of Miraflor and they never come here”. Not only is there a lack of institutional presence in the protected areas but also many are privately owned (almost 90%), which makes their management a rather challenging task. Only four areas are situated on state-owned lands (including both Bosawas and Indio-Maiz). The lack of funds has therefore made it difficult for the Nicaraguan government to compensate landowners to convert the established protected areas into state property (Saalismaa, 2000). Other problems that threaten this protected area system are uncontrolled logging, illegal hunting and commercialisation in the pet trade, environmental contamination by pesticides, as well as the advance of the

219 Maria Rivas, Director of Commerce and Environment, MARENA – Interview held in Nicaragua on 11th May 2005
220 Adolfo Valasquiz, campesino from Miraflor Reserve – Interview held in Nicaragua on 3rd June 2005
agricultural frontier and the encroachment on park perimeters etc. (Weaver et al., 2003).

Although Nicaragua may have an adequate institutional and legal framework, the avid pursuit of neoliberal reform in the country, like its southerly neighbour, and the subsequent downsizing of the state through deregulation has resulted in severe cutbacks in government spending. This has ultimately affected MARENA’s budget as well as its capacity to operate as an effective ministry and indeed implement and maintain an operative protected areas system, upon which the MBC is based. Indeed, with the MBC’s transformation along increasingly neoliberal directions (see discussions in chapter five) and the Nicaraguan government’s intent to implement DR-CAFTA as well as to pursue the construction of dry canal projects (as part of the PPP) (Costantini, 2006; Warpehoski, 2004b), it would seem that at the national level, the MBC has had little impact on protecting the country’s natural resources, and instead has become little more than a greenwash over development as usual. Even MARENA, as Clemente Martinez221 from the Centro Humboldt made clear “puts business before protecting the environment”. Similar to Costa Rica however, the limited impact of the MBC in promoting sustainable development within Nicaragua does not mean that nothing within this realm is being achieved. The next section looks at the NGO movement in Nicaragua and how these organisations along with other civil society organisations are coming together to substitute the inefficiencies of the state and are building their own projects as well as collaborating with the state to help protect the environment.

7.5.2 Nicaraguan NGOs and the MBC

Similar to the Costa Rican case, the inadequacies and inefficiencies of MARENA and the Nicaraguan government as a whole (as discussed in the previous section), have lead many NGOs to initiate their own projects alongside local communities in and around the protected areas of the MBC in Nicaragua. For example, The

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221 Clemente Martinez, Campaign Coordinator Centro Humboldt (research institute) - Interview held in Nicaragua on 17th May 2005
Nature Conservancy (TNC) in Nicaragua, according to their Nicaraguan representative, Amando Ubeda\textsuperscript{222};

“help towards the creation of management plans as well as land titling with indigenous populations in Bosawas reserve, northern Nicaragua. We also train the local communities to manage their own projects and execute agro forestry projects and reforestation projects along the rivers”.

Indeed Sr Ubeda acknowledged the fact that “the MBC is related to BOSAWAS as the reserve is part of it. But the people behind the MBC don’t gives us funding to support the reserve”. In many ways, it may not be surprising that this particular NGO has not received funding from MARENA, considering BOSAWAS is a state-run protected area. However, with BOSAWAS reserve, “constituting the heart of the MBC and representing the largest protected area complex of tropical mountain forest north of the Amazon basin (40, 000km\textsuperscript{2})” (UNESCO, 2002), it seems interesting that there is a necessity for an NGO project of this nature despite the funding of state entities charged with the administration and management of the park. Once again this outlines the incapacities of the state and indeed MARENA to adequately protect a key protected area which is the considered to be the heart of the MBC.

Although it can be argued that peasant agriculture has also played its role in intensifying environmental degradation, there have been some local communities in Nicaragua that have taken responsibility for their actions and have gone about setting up their own conservation projects that do not rely governmental assistance. The Miraflor Reserve in northwestern Nicaragua is one example of successful grassroots conservation, where the resident peasant producers “take care of the reserve and not the government”\textsuperscript{223}. This reserve was declared a protected area in 1996 due to an initiative taken by the local population alongside UCA-Miraflor (Saalismaa, 2000), an NGO whose aim was “to rescue the cooperative movement”\textsuperscript{224}. UCA-Miraflor helps small and medium producers from the Miraflor area to establish themselves in small agricultural cooperatives

\textsuperscript{222} Amando Ubeda, The Nature Conservancy – Interview held in Nicaragua on 18\textsuperscript{th} May 2005
\textsuperscript{223} German Ramirez, Foro Miraflor – Interview held in Nicaragua on 31\textsuperscript{st} May 2005
\textsuperscript{224} Francisco Munoz, General Manager UCA-Miraflor – Interview held in Nicaragua on 8\textsuperscript{th} June 2005
“to promote sustainable development and environmental protection” (UCA-Miraflor, ND). Before the creation of the reserve, Miraflor suffered from high deforestation rates and pesticide contamination, which, according to one Miraflor resident “was a legacy of the previous capitalist owners”225 or the latifundistas226. However, as the local residents started to recognise the effects that these activities were having, a unified action was taken amongst small-scale landholders to slow environmental destruction, which eventually lead to the establishment of the Miraflor Reserve as a protected area. Today, therefore, as Adolfo Valasquiz, a campesino from the reserve, made clear, “we are the ones responsible for conservation, as governments come and go but the communities are the ones that remain in the area”. Environmentally sustainable activities are practiced within the area, such as growing organic coffee and bananas as well as flowers. Whilst not directly working alongside the regional MBC initiative or with the state, therefore, the development of projects lead by autonomous groups, such as peasant producers from the Miraflor Reserve, are at least contributing to the overall conservation of Nicaraguan natural resources and the MBC at the national and local level. Once again, this demonstrates how there is still a presence of the original interventionary interpretation of the MBC rather than the more neoliberal interpretation that seems to embody the regional MBC initiative today (see chapter 5 section 5.2). As discussed in the Costa Rican section on NGOs, this interventionary emphasis points to the existence of potential tensions in the direction of the MBC between those funding and managing the regional initiative and those implementing the smaller projects which are brought together under the MBC umbrella. The tensions across the regional, national and local spectrum suggest the potential inadequacies of such a top-down initiative like the MBC.

In other cases, as outlined in section 7.4.2 of this chapter, the heterogeneity of NGOs within Nicaragua has meant that there are some NGOs that are more willing or indeed are more obliged to be involved with state run projects. The

225 Rolando Talavera, campesino in Miraflor Reserve – Interview held in Nicaragua on 7th June 2005
226 After the Sandinista revolution, large estates were confiscated and divided up and distributed amongst campesinos and cooperatives were created, although this process was somewhat reversed after the change in government in 1990. Today, therefore, the land in Miraflor Reserve belongs to both small- scale and large-scale landowners (Saalismaa, 2000).
willingness of NGOs to work with the state may be as a result of the state being able to secure funding for these specific NGOs or that the NGOs believe it would be in their best interests to cooperate with the state in relation to their work. The obligation of NGOs to work with the state may be as a result of the fact that their donors, which could be outside neoliberal governments and/or IFIs, are having a say over their activities (see section 7.2 of this chapter). An example of a state-NGO partnership is a pilot project called COMAP (Co-management of Protected Areas Project). COMAP is underway in six protected areas in Nicaragua which focuses on the strengthening of local NGOs to co-manage priority protected areas in coordination with MARENA (Eco-Index, 2002). With a $3.2 million grant from USAID, COMAP was developed in response to a recent legislation in Nicaragua that has encouraged national agencies, NGOs and local governments to work together to explore ways in which to work with each other to improve renewable resource management, preserve biological diversity and help communities develop economic opportunities (Juksfsky and Bolanos, 2002; ARD-MARENA-USAID, 2002). According to Maritza Rivera227, a representative from USAID in Nicaragua;

"COMAP demonstrates that we can conserve what we need to conserve with priority. Now all of the six protected areas have management plans, institutional presence, personnel and park guards".

However, whilst it would seem that COMAP could be potentially achieving positive results and fulfilling its objectives, the fact that USAID is funding the project may mean that this agency has more influence over the project than local/national NGOs. Tensions seem to exist amongst actors across the whole spectrum of the MBC initiative, the example of COMAP further highlights that even within a smaller-scale national project, conflicts may well be occurring amongst key actors. Once again this confirms the complexities of the MBC, not only at the regional scale, but also at the national and local scales.

227 Maritza Rivera, Representative USAID- Interview held in Nicaragua on 5th May 2005
As this chapter has demonstrated, it is clear that the complexities and inconsistencies of the regional MBC initiative are indeed manifesting themselves at both the national and local levels. As the examples from Costa Rica and Nicaragua have shown, there are a plethora of environmental policies, institutions and legal frameworks that exist within both countries. However, despite the existence of such policies and laws, problems have arisen with their effective implementation which is as a result of there being a lack of resources, particularly financial, which limits the institutional capacities of their environmental ministries. It can be argued that the root of these financial problems is the debt that each of the countries owe to IFIs coupled with the promotion of neoliberal reform in both of the countries. The promotion of such neoliberal reform policies by these countries’ governments has resulted in money being diverted away from environmental ministries as their leaders seem to be more intent on pursuing policies that favour economic development over environmental conservation. This therefore highlights the tensions within the actual different sectors of government itself. Such internal conflicts within government institutions do not bode well for the effective implementation at the national level of environmental initiatives such as the MBC. With neoliberalism now being the dominant discourse amongst the region’s governments and indeed in Costa Rica and Nicaragua, it is of no wonder that the MBC now echoes with the sound of nature commodification and market liberalisation. Although, in countries like Costa Rica for example, the development of financing mechanisms have so far been able to keep their ministries and their park systems afloat, this still does not detract from the fact that the country’s government is literally cashing in their natural resources capital via schemes such as debt for nature swaps (Umaña and Brandon, 1992; Lovejoy, 1994). This links back to the discussion in chapter 3 (section 3.4), which highlights how Central American governments are keen to target areas that would boost external investment in the region; the environment being one of these key areas.

Nicaragua, on the other hand, has not had the political stability or financial capacity to develop environmental institutional structures and strategies like those
of its neighbour. In many ways, therefore, the country is still lagging behind somewhat in its capability to implement its programmes effectively and enforce its laws. However, even if environmental ministries were better resourced, there is a high possibility that they would still lack the political influence to enforce needed changes in overall policy direction e.g. developing policies in Nicaragua that would address the poverty of rural communities and hence their need to over-exploit their natural resource base. Despite this, with increased political and economic stability, the situation in Nicaragua is changing. For both of these countries, their environmental movements would not have been able to grow without the help of Non Governmental Organisations. It is these organisations that can not only gain access to funding not offered to governments, but they can also have more practical and scientific expertise than government departments as well as have the ability to mobilise communities much more effectively. The importance of the NGO movement, therefore, although it may have evolved in different ways in these countries, has been pivotal for the delivery of effective projects that contribute to the overall impact of the MBC initiative. To this end, whilst the MBC continues to sell itself as a regional initiative that fosters ‘sustainable development’ within the Mesoamerican region, it must be remembered that the implementers of real environmental change are those organisations working at the grassroots level including the communities themselves.
8. Conclusions

"We do not inherit the earth from our ancestors, we borrow it from our children".

~Native American Proverb.

8.1 Introduction

The purpose of this chapter is to draw together the conclusions from the discussions of each chapter and then present the main conclusions from the thesis as a whole. The final sections of the chapter will consider the potential grassroots alternatives to the dominant neoliberal conceptualisation of sustainable development and possible directions for future research.

8.2 Major Findings

The thesis began with a detailed analysis of the conflicting debates surrounding the sustainable development concept in chapter 2. This chapter discussed the evolution of the term and how, over time, it has become more widely used on the international stage amongst and within several sectors including governments, NGOs, businesses etc. The broadness and ambiguity of the concept’s meaning along with its lack of specificity and clear definition has resulted in many different interpretations arising amongst these actors with regard to what should actually be sustained, what should be developed and when sustainable development could be said to have actually been achieved. Such differences in meaning have caused complications for the implementation of sustainable development strategies and have in some cases, resulted in the co-existence of initiatives with contradictory objectives which each claim to be striving to achieve ‘sustainable development’. Whilst identifying the different approaches towards sustainable development, from the radical to the more mainstream, what was made clear from the discussion in this chapter is how, since the concept’s origin in the 1970s, there has also been a gradual shift within the mainstream to the adoption of a more neoliberal approach; an approach which promotes “a belief in markets rather than state led solutions to social and environmental problems” (Liverman and Vilas, 2006; 328). Internationally, this shift into the neoliberal paradigm was demonstrated just two years after the Earth Summit
in Rio when governments, having committed to protect their environment, congregated at Marrakech which was to give rise to the formation of the WTO and the consolidation of a much more profitability-oriented perspective towards the management of natural resources. In this way, although radical approaches towards sustainable development persist, the neoliberal model continues, for the moment, to be the most dominant discourse that influences the implementation of sustainable development initiatives.

Chapter 3 focused the study on Central America, the region where the field research was conducted, and traced the evolution of the dominant regional economic models and the roots of the current environmental crisis; factors which have shaped today’s Central American sustainable development debate. Having described the nature of the Central American environment, the chapter discussed in detail the economic development patterns that have occurred in the region since the Spanish Conquest in 1509. In particular the chapter discussed how the development of the agro-export model during the late nineteenth century emphasised the already unequal land ownership in the region with the best agricultural land and resources being concentrated into the hands of a few elitist groups. Such land monopolisation has had severe consequences for the small landowners, typically poor peasant farmers, who were subsequently pushed into the surrounding hillsides where they were forced to farm poor quality land and to over-exploit the natural resources for survival purposes. Due to the limitations of the agro-export model, its dependence on the vagaries of the international market for primary commodities and the over-exploitation of labour, the chapter argued how, after World War II, the model failed to sustain economic development in the region despite the large profits that were made. These limitations led some of the region’s governments to adopt a more intra-regional model of development which enabled the region’s markets to be protected by high tariff barriers. The development of the Central American Common Market (CACM), therefore, initially helped the region overcome their dependence on agricultural products and spur economic integration and industrialisation within the region. However, by the end of the 1960s, the model soon began to falter as some countries and indeed some sectors were benefiting more than others. With the distortions of the agro-export model becoming apparent once again, coupled with
the onset of problems that the region experienced during the 1970s, such as the impacts of the oil crisis etc., the chapter examined the eventual breakdown of the CACM. The incapacity of the region’s governments to pay back international borrowing they had used to implement the import substitution strategies of the CACM resulted in a regional debt crisis during the 1980s. This crisis forced the region’s governments to adopt neoliberal structural adjustment programs (SAPs) formulated by the IMF and World Bank. Indeed it is this period in particular which marked the regional shift into the neoliberal paradigm.

Through the adoption of SAPs, the chapter outlined how governments were encouraged by the international financial institutions to (a) devalue their currency (b) reduce state expenditure (c) deregulate foreign trade (d) liberalise their markets (e) privatise state owned companies and (f) deregulate the labour market. Such policies laid the foundation for the promotion of the neoliberal model within the Central American region. Although debts were reduced and some positive growth rates incurred, such benefits were only achieved at the expense of increased poverty and income inequality within the region which created a new ‘selective growth’ model. The chapter also highlighted how, the adoption of these neoliberal policies has promoted the development of a new transnational model of development in the region; a model which has seen the region’s economy come under the increasing control of what Robinson (1998a) terms a transnational elite (a term which includes those working in supra-national institutions such as the IMF and major global corporations) which is becoming increasingly intertwined with the various sectors of the Central American elite. Such internal hierarchical and external control has enabled these ‘elites’ to influence regional and global decision making processes which has had huge political, social and environmental consequences for the region.

The analysis in Chapter 3 went on to illustrate how the neoliberal model, rather than addressing the environmental problems caused by its predecessor, the agro-export model, has merely intensified the Central American environmental crisis. Nevertheless, the chapter also explains how at the same time as neoliberalism was being established as the dominant set of ideas on development in the region, the foundations were also being laid for a whole range of new activities in the
environmental sphere (e.g. the establishment of regional environmental institutions, the passing of national legislation etc). These developments reflected a mixture of (a) an actual desire to protect the region’s environment (b) the need to respond to the growing external pressures to address the region’s environmental destruction (c) the search for the external finance available in environmental arenas by Central American governments, and (d) the influence of a growing environmental awareness amongst the region’s peoples.

In general, whilst this new environmental awareness resulted in a series of different responses amongst the various institutions/organizations active in the field, many of the initiatives have been heavily influenced by market-friendly neoliberal perspectives on sustainable development and the neoliberal dominance of other policy arenas (such as trade or industrial policy) has had a big impact on the outcomes of environmental policies or resource management strategies. Of course, other more disparate groups also constitute the Central American environment movement e.g. autonomous environmental and social movements who continue to press for more radical solutions to the region’s environmental problems or at the very least for a return to the more interventionist thinking on sustainable development that had been apparent at Rio. Nevertheless, neoliberal approaches towards the concept still permeate and influence the direction of the institutional responses towards dealing with the environmental crisis. Whilst it is clear that institutional responses to the current environmental crisis have raised the profile of the environment and brought such issues to the forefront of political debates in Central America, the regional governments’ ongoing pursuit of economic growth (which is clearly in my opinion unsustainable within the current neoliberal paradigm) seems to remain the main priority. This priority, coupled with the increasing influence of outside actors, such as IFIs and external governments (particularly the US), which continue to encourage the consolidation of the neoliberal model within the region, has had a huge impact on the direction and implementation of regional sustainability initiatives such as the Mesoamerican Biological Corridor.

The thesis has been orientated around the Mesoamerican Biological Corridor as this particular regional sustainability initiative provides a unique opportunity to explore
sustainable development debates and environmental governance conflicts within the Central American region in more detail. Chapter 4 discussed the methodologies that were adopted to explore such debates. The main approach that was taken to fulfil the research objectives outlined in chapter 3 was the use of qualitative research techniques, which were mainly the analysis and collection of key documents in both Spanish and English and the conduct of ninety-three semi-structured interviews with key stakeholders at different spatial scales. The interviews in particular were especially important to carry out as they not only supported the information provided by the grey material reviews but they also provided confirmation that the MBC regional initiative, for example, was having very little impact at the local level. This information could only have been obtained by actually going to the field. Such methodological techniques, therefore, allowed the author to unravel the different understandings of the sustainable development concept amongst different organisations, institutions and individuals in the Central American region in relation to the corridor. Although the methodological approach that was undertaken has provided a regionalised example of discourse analysis, a real strength of the thesis has been the analysis of the intersections and disconnections between all three initiatives. Whilst in many cases the MBC, the PPP and DR-CAFTA are often treated as separate components, this thesis, by analysing the inter-relationships amongst all three initiatives at the different spatial scales, has provided a deeper insight into the contemporary Central American situation in relation to environmental issues and economic structures and their interconnections. The chapter also reviewed how positionality influences research as well as the importance of being aware of how such influences can impact upon data interpretation. Finally the chapter discussed how the data that was collected from both documents and interviews was analysed and how this information was eventually used to help shape the thesis.

Chapter 5 to 7, which presented the findings from the fieldwork carried out in the Central American region, delved deeper into the analysis of the sustainable development debates surrounding the MBC. The first part of chapter 5 reviewed the genesis of the corridor, its current objectives, how it is funded and its institutional structure. The second part of the chapter explored the changing nature of the initiative since the Paseo Pantera, looking more specifically at how the MBC has
changed over time and why. The chapter emphasised how the origin of the corridor initiative clearly had far more ecocentric ideals than it does today. This was essentially linked with the fact that the MBC’s inception as Paseo Pantera was proposed by conservation orientated NGOs whose priorities lay more with protecting biodiversity than addressing the region’s social problems. The changing of hands of the initiative in 1995 to the region’s governments saw increased integration of both economic and social factors into the objectives of the corridor. As the chapter explained, the initial change in the MBC objectives during the mid 1990s demonstrates the gradual shift into the more mainstream sustainable development approaches. The chapter also highlighted the fact that not only have the objectives of the MBC been broadened and somewhat diluted from what they were originally but so too has the actual management of the MBC initiative. Whilst the eight regional governments may be overseeing the regional initiative along with IFIs such as the World Bank, other more autonomous groups such as grassroots NGOs are also contributing towards the corridor idea and striving towards the goal of what their interpretation of ‘sustainable development’ is. However, the lack of coordination and communication between these actors has resulted in a poorly coordinated and orchestrated regional initiative.

Despite the existence of a range of different interpretations of sustainable development amongst the different MBC stakeholders, the chapter emphasised how the dominant neoliberal discourse has had a more profound impact on shaping the guiding principles of the MBC than perhaps other sustainable development discourses. Initially, after the shift from the Paseo Pantera, the MBC reflected a more interventionist approach towards sustainable development. However with the increasing dominance of the neoliberal model in the region, the chapter demonstrated how the MBC at the regional level has now gradually become subservient to the neoliberal agenda with its objectives geared more around ideas of nature commodification and market environmentalism. In particular, it has been the development of the MBC Business plan that was launched by the CCAD in 2002 that has placed the MBC initiative squarely in the neoliberal agenda along with the initiative’s association with the Plan Puebla Panama (see below). Essentially, the chapter argues that today the MBC has become little more than a political conceptual
framework in the hands of politicians and IFIs, such as the World Bank, in pursuit of consolidating the neoliberal model in the region. This is an example of how neoliberal policies have served to influence the environmental agenda within the region. Although the MBC may have raised the profile of the environmental issues within the region, improved institutional strengthening, assisted with the valuation of natural resources etc, there has actually been little change in development priorities within the region and few tangible results can be seen on the ground. The chapter concluded that the MBC, rather than addressing the environmental and social problems of the region and engaging at the grassroots level, is largely an attempt to greenwash the current development agenda of the region that satisfies the neoliberal objectives of the regions’ governments and IFIs. The validity of this characterization of the MBC can be seen from the way in which the MBC has recently become increasingly linked with other initiatives in the region which have very different developmental and environmental priorities. The most important example of this is the Plan Puebla Panama, a major regional development plan which focuses on economic integration and infrastructure. The relationship between the PPP and the MBC was considered in depth in Chapter 6.

The first sections of chapter 6 explored in more detail the history of the PPP and how it came into being, its general objectives, the aims of each of the PPP’s eight separate initiatives and how the Plan is being funded. The second part of the chapter went on to discuss general criticisms of the PPP and specified the environmental and social impacts of the Plan. Indeed this part of the chapter highlighted the PPP’s particularly neoliberal nature emphasising how the Plan, with its top down vision of development and focus on infrastructure mega-projects, seems to favour corporate interests rather than those of the people of the region as a whole. As a result of considerable grassroots resistance along with the initial lack of funds to launch all the projects, the chapter discussed how the PPP promoters repackaged the Plan in 2003 to make it appear more environmentally and socially friendly. In particular the PPP’s new focus was orientated towards being more ‘sustainable’ with the inclusion of the IMDS (Mesoamerican Initiative for Sustainable Development); one of the eight PPP initiatives which, with its apparent environmental management and sustainability focus, provides the link between the PPP and the MBC. Chapter 6 examined in more
detail the objectives of the IMDS and the four operational programs that exist under the IMDS umbrella, the MBC being one of these programs. It was emphasised how the PPP promoters have used the MBC Business plan to hinge itself onto the MBC. This new neoliberal orientation of the MBC has allowed the PPP and the MBC to be tied together. This joining has essentially been facilitated predominantly through the fact that the institutions behind both the MBC and the PPP, which are similar or indeed the same institutions, now share common neoliberal ideologies.

Chapter 6 argued that, although a considerable amount of controversy exists as to whether the two initiatives are officially joined, the collaboration of the MBC and the PPP represents the joining together of two neoliberal strategies. Whilst the MBC seems to be doing little more than promoting the accessibility to the region’s natural resources, the PPP intends to intensify the utilization of these resources in order to boost the region’s economies. However, whilst the MBC may envisage a broader vision of sustainable development than the PPP, the fact that neoliberalism remains the most dominant discourse within the region suggests that the PPP’s strong neoliberal ideologies will only pull the MBC further into this paradigm. In this way the PPP promoters have been able to utilise the MBC as a political mask to raise its own environmental profile without really having to change its underlying neoliberal philosophy. The chapter reviewed several concrete examples of how the PPP has taken advantage of its MBC counterpart with many of its projects coming into direct conflict with the appropriate management of MBC territory e.g. the construction of a hydroelectric dam in the Maya Forest in Guatemala which provides a cornerstone for the geographical MBC and the potential dry canal construction which may carve through the Nicaraguan Atlantic section of the MBC. It was demonstrated therefore that frequently the MBC merely acts as a veil under which the PPP is able to pursue neoliberal objectives in order to satisfy corporate interests by which both initiatives are seemingly fuelled.

Chapter 6 went onto discuss how both the MBC and the PPP fall into a framework of a program with greater magnitude and which has potentially greater social and environmental impacts; the recently signed Dominican Republic-Central American Free Trade Agreement (DR-CAFTA). This section of the chapter explored in more
detail the background to DR-CAFTA and specified the parties behind its proposal and indeed the signatory countries participating in the agreement. It was clearly emphasised that DR-CAFTA seeks to advance the neoliberal processes within the region further via increased trade liberalisation, deregulation and privatisation. It was stressed how increased trade liberalisation and privatisation would exacerbate social and economic inequality and increase the corporate hold over the region by essentially only benefiting a tiny political and economic elite at the expense of the general public. At the same time, it was underlined that once DR-CAFTA had been implemented in the region, governments may weaken environmental laws in order to continue attracting foreign investment. Such weakening of environmental laws, as the chapter highlighted, will have serious environmental implications for the region e.g. the attraction of environmentally-irresponsible industries of mass production.

The chapter concluded by drawing upon the fact that DR-CAFTA and the PPP are essentially part of the same neoliberal package; DR-CAFTA pursues market liberalisation, deregulation and privatisation whilst the PPP provides the infrastructure for more efficient inter-regional and global trade. With the MBC’s increasingly strong link with the PPP and its entanglement in larger programmes such as DR-CAFTA, it was concluded that the MBC is unlikely to catalyse any significant political or social changes that could work towards achieving environmental sustainability in the region. On the other hand, however, it could be argued that at least the inclusion of the MBC has forced the PPP promoters to perhaps take environmental matters more seriously than would have been the case if the corridor initiative had not been included in the PPP. Additionally, the MBC has been able to raise environmental and social awareness amongst regional and national actors and brought such topics to the forefront of political debates. The chapter recognised that this awareness, for the most part, can be attributed to the success of some specific national projects.

Having examined the MBC at the regional scale, chapter 7 used examples from Costa Rica and Nicaragua to explore in more detail how the MBC was being implemented at the national and local scale. The chapter first of all identified and discussed the roles of the key actors operating at this scale e.g. government institutions and Non
Governmental Organisations (NGOs) and then continued to explore how and whether these actors had integrated themselves into the corridor initiative. Linking back to chapter 3, chapter 7 argued how the state and NGOs have tackled environmental issues in different ways due to where these actors situate themselves in the sustainable development debates. It was made clear that although the state, particularly environment ministries, may have good intentions for protecting their environment with the creation of policies and laws etc, overall government priorities continue to give precedence to economic imperatives e.g. the development of the Plan Puebla Panama and the signing of DR-CAFTA. Indeed, the consolidation of the neoliberal model in the region has not only intensified the environmental pressures but has also resulted in the weakening of the state which has meant that their capacity to be effective environmental guardians has been diminished even further. Such governmental incapacities, as the chapter identifies, have created a gap in the political arena for the emergence of NGOs. Chapter 7 described the role of NGOs, the reasons behind their motivations, their heterogeneous nature and reviewed recent debates that questioned NGO legitimacy and their democratic credentials. Whilst in many cases NGOs reflect a more interventionist or radical approach towards sustainable development, attention was drawn to the fact that some NGOs are funded by institutions that promote neoliberal reform in the region e.g. the World Bank. Financial backing from such institutions has raised concerns amongst critics as to the influence that these institutions may have over the direction of NGO activities. The chapter recognised that whilst at the regional level NGOs may have negligible impact, their ability to mobilise civil society and penetrate at the grassroots level still makes them key actors within development processes.

In order to discuss how the MBC has developed at state level, chapter 7 explored the background and the differences between the environmental institutional structures and strategies of Costa Rica and Nicaragua, two very contrasting countries which provide a unique comparison of two different state’s capacities to pursue and achieve sustainability objectives. The chapter traced the evolution of the environmental institutional movement in both Costa Rica and Nicaragua, looking at how both states have responded to the regional environmental crisis with an upsurge of policy making, the creation of institutions etc. At the same time the chapter...
emphasised how, despite such effort in policymaking, the impacts of neoliberal reforms in these countries has resulted in ineffective policy and law implementation. This has been primarily due to the diversion of money away from their respective environmental ministries and the overall changing priorities of the governments themselves although the chapter also drew our attention to the presence of internal conflicts amongst different sectors of governments over the level of commitment to environmental objectives. However, whilst both countries suffered from the impact of neoliberal reform, it was noted that Nicaragua has also suffered from the severe setbacks from the contra war in the 1980s which saw the complete abandonment of its environmental program during that time. In many ways, therefore, such a set back has meant that Nicaragua is behind in its evolution of its environmental institutional structures and strategies in comparison to Costa Rica.

In the context of the MBC, chapter 7 demonstrated how the promotion of neoliberal reform has also impacted the effective implementation of this initiative in both Costa Rica and Nicaragua, particularly at the grassroots level. When discussing Costa Rica’s integration into the MBC, the impacts of neoliberal reform have been two-dimensional. Firstly there has been a noticeable gap between policy rhetoric and implementation on the ground. This was demonstrated by the lack of active participation and consultation with local communities within the corridor; actions which the environment ministry consider to be important for effective conservation of natural resources. The chapter therefore emphasised how the ministry’s decreasing budget as a result of the downsizing of the state has meant that Costa Rica’s environment ministry (MINAE) has not been able to carry out their goals. Secondly, this budget deficiency coupled with the overall changing priorities of the state, has lead to MINAE placing an increasing amount of emphasis on developing and introducing new financing mechanisms that aim to utilise nature to generate funds e.g. the environmental services payments programme. Reflecting strong neoliberal ideologies of ‘selling nature’, such financing mechanisms demonstrate how the consolidation of the MBC at the national level has perhaps allowed for an intensification of neoliberalisation of Costa Rican environmental policy. Whilst such neoliberalisation of environmental policy may not have been so obvious in Nicaragua, chapter 7 demonstrated the internal conflicts amongst different sectors of
the Nicaraguan government with regard to the MBC; on the one hand strong
proclamations have been made by the state in support of the MBC whilst on the
other the same state has continued to aggressively pursue expansion and
intensification of agro-export production and has failed to enforce its environmental
laws. The chapter also noted the budget deficiencies of the Nicaraguan
environmental ministry which has meant that protected areas, upon which the MBC
is based, are without adequate protection, regulation and management. With the
Nicaraguan government intent on consolidating the neoliberal model along with the
cutbacks in government spending it would seem that at the national level, the MBC
has had little impact on protecting the country’s natural resources. In many ways,
therefore, both the Costa Rica and the Nicaraguan examples demonstrated the
contradictions between the promotion of the neoliberal model and their apparent
conservation agendas. It was concluded that the MBC at the national level, rather
than attending to the needs of the country’s people and the environment, seems to be
merely satisfying the whims of the IFIs and neoliberal governments and the
corporate interests of MNC’s.

Finally, chapter 7, having discussed the evolution of the NGO movement in both
Costa Rica and Nicaragua, highlighted the roles of NGOs within the corridor
initiative in both of these countries. By drawing upon the earlier discussion, the
chapter emphasised how NGO operations, whilst not necessarily collaborating with
the governing bodies behind the MBC, represent the continuation of the original
more interventionary and/or ecocentric emphases of the MBC project. The chapter
therefore identified that not only are there tensions amongst government sectors with
regard to the MBC but also amongst those managing the regional/national initiatives
and those in charge with the implementation of the smaller projects which are
brought together under the MBC banner. Such tensions outline the complexities and
indeed the inconsistencies of the MBC as a whole. These complexities and
inconsistencies highlight the conflicts over environmental governance amongst
different actors who have contrasting perspectives on sustainable development.
8.3 The Dominance of Neoliberalism: Questioning the Sustainability Agenda

The thesis has shown how the ambiguities of sustainable development have manifested themselves within a specific region of the world and how impacts of such ambiguities have resulted in conflicting approaches towards environmental governance. As Nygren (1998; 204) argues;

"there are multiple state institutions, international aid agencies and NGOs, pursuing different goals and responding to different ideologies in their struggle over sustainable development".

Whilst other variants of sustainability exist in Central America, particularly amongst stakeholders at the grassroots scale, a major conclusion that can be drawn from the thesis is that neoliberalism has evolved over the last thirty years as the dominant discourse within the Central American region amongst actors within the development/environment arena at both the regional and national scale. As a result, this neoliberal way of thinking has served to influence the environment agenda in Central America and has shaped the guiding principles of sustainability initiatives such as the Mesoamerican Biological Corridor. This neoliberal influence on the MBC has not only meant that the initiative today "presents a complex management challenge with extremely ambitious goals" (Dettman, 2006; 33) but it has also had little impact at the grassroots level and fails to address the roots of the region's social and environmental problems. Instead the MBC, whilst using the language of sustainable development, provides an excuse for the region's governments and other regional and international institutions behind the initiative to exploit Central America's resources and boost foreign investment in the region. This outcome is purely because the MBC has now become engrained within the neoliberal agenda. With this in mind, it can therefore be concluded that top down sustainability initiatives like the MBC that operate within the neoliberal paradigm and in a centralised manner are an ineffective approach towards the conservation of natural resources. At the same time such an approach towards sustainable development does not "take into account local specificities and needs of various groups" (Braidotti et al., 1994; 181).
The example of the MBC and the increasing dominance of neoliberalism within sustainability agendas in regions of the world like Central America raises questions about the future viability of the concept of sustainable development as a whole and whether or not the term can continue to be used to guide policy agendas. In many ways it would seem that the lack of agreement on the actual definition of sustainable development has allowed the concept to be easily moulded to fit neoliberal ideologies. Even other mainstream schools of thought such as interventionism have been thrown by the wayside to make way for such neoliberal dominance and the rule of the unregulated market. However, whilst neoliberalism seems to be a thriving model of development to some, the perception of the concept is slowly starting to change amongst the development community as to whether or not it is the most functional model and indeed the most effective and translucent interpretation of sustainable development. Already in some Latin American countries, the neoliberal model is being rejected by governments and civil society alike e.g. Venezuela, Bolivia. Even Costa Rican civil society and some sectors of the government are still heavily protesting against the implementation of DR-CAFTA and trade liberalisation – one of the main pillars of neoliberal policy. However, whilst the impacts of neoliberalism on sustainability agendas in other parts of the world is beyond the scope of this thesis, the impacts that are being experienced in Central and other parts of Latin America, would suggest the necessity to rethink the concept and to establish whether or not a more suitable rhetoric can be formulated which is clearer and less ambiguous. Having used the example of the MBC within the Central American region, the conclusion that has been reached from the discussion is that the concept of sustainable development can by no means be translated into a clear policy agenda. Instead it merely offers us a glimpse into the complexities of the development and environment relationship and perhaps calls for the necessity to look for new and alternative ways of thinking about this relationship and how sustainability can be achieved more effectively.
8.4 Towards a Sustainable Alternative to the Neoliberal Agenda: A Grassroots Revolution?

The thesis has mainly concentrated on the sustainable development debates that surround the regional MBC initiative and demonstrated how, within the neoliberal paradigm, such initiatives are unlikely to spark any social or political change that contribute towards achieving sustainability. Although it is difficult to predict accurately how the MBC will develop in the future, it would seem that for the time being it has become completely locked into the neoliberal agenda, especially with its newfound links with the Plan Puebla Panama. These links with the PPP could be further strengthened due to the fact that the external financing that has, until this point, helped to support the regional MBC, has run out. It has already been concluded that the MBC is not a perfect policy towards achieving sustainable development and so the purpose of this section, therefore, is to consider and reflect on how sustainable development, if indeed we can continue to employ the term, might be more effectively pursued in Central America and what the political alternatives would be, with or without the MBC.

In general, the findings of the thesis have led the author to believe that there are alternatives to top down neoliberaIly orientated mega projects, namely those with a more grassroots emphasis e.g. smaller scale projects that engage more with local communities. In relation to the MBC, therefore, as Dettman (2006; 24) proposes;

"MBC planners should consider ways to engage local participants...this would establish a direct relationship with local communities, helping to alleviate its reputation as an international program that is disengaged from local concerns"

Indeed many interviewees for this research supported the fact that there needs to be a increased focus on community participation and that these communities need to be empowered more and have a key role in decision making processes. As Barrow and Fabricius (2002; 76) argue community based conservation228 (CBC) is "the glue to

228 Although community based conservation has been advocated by some conservationists as an effective way to protect the environment, the idea has been increasingly challenged in recent years by various other conservation professionals (Worah, 2002; Berkes, 2003; Agrawal and Gibson, 1999). Such an approach towards conservation has been criticised as being "too controversial because community development objectives are not necessarily consistent with conservation objectives" (Berkes, 2003; 621). Other critics have argued that the approach "views community as a unified, organic whole.. and it fails to attend the differences within communities, and ignores how these differences affect resources management outcomes, local politics and strategic interactions within
help make conservation an integral part of land use planning". In an interview for this research in Guatemala, Jorge Cabrera\(^{229}\), the ex-secretary for the CCAD, made this clear by arguing that “the main challenge is to save the remaining natural areas and this can only be achieved if we work together with people who are living there”. This improved integration and empowerment of communities would allow for the development of a more participatory and also a more decentralised model of environmental management (Rivera et al., 2002). At the same time, such empowerment and the promotion of a more decentralised model could also help to appease corporate control over the natural resources in the region by “placing communities in control of their resources, ecosystems, economies, politics, cultures and destinies” (Karliner, 1997; 218).

However, although it is imperative to place more emphasis on projects at the grassroots level and encourage a more decentralised process of sustainable development “the empowerment of local groups should be balanced by a continuing role for central government to deal with market failures and to ensure social equity and environmental protection” (Lutz and Caldecott, 1996; 2). There needs to be a balance therefore between grass roots development and markets based approaches as an over emphasis on grassroots development would deprive a nation of necessary resources for healthy economic growth. In this way, so that Central America may come a step closer towards becoming more sustainable, it is also essential that the region:

1. develops more coherent national policy frameworks that work towards addressing the conflicts of the environment-development dynamic;
2. diversifies their economies so that there is not an over-dependence on a few agro-exports;
3. implements stricter law enforcement;
4. promotes education campaigns regarding natural resources amongst the different stakeholders, particularly at the grassroots level;

\(^{229}\) Jorge Cabrera, Ex – Secretary CCAD— Interview held in Guatemala on 22\(^{nd}\) July 2005.
(5) improves communication amongst and between stakeholders at different spatial scales;
(6) improves research and monitoring which would assist policy makers and add to debates on sustainable development (Utting, 1994; Dettman, 2006; Brechin et al., 2002).

The adoption of such changes would essentially mean a shift away from the top down neoliberal emphasis towards sustainable development and the adoption of more interventionist or technocentric approaches. Such a change, as Karliner (1997; 219) laments, would require;

"reinventing the nation state in a fashion that transforms it from an elitist, unaccountable, overly bureaucratic, often corruption-ridden entity to a new model of governance that is an expression of grassroots democracy"

Indeed a more grassroots as well as a more decentralised approach, along with improved communication and improved partnership with actors at all spatial scales would ensure the development of more successful sustainable development projects (Wells, Brandon and Hannah, 1992; Brechin et al., 2002). As Nygren (1998; 219) argues;

"the struggle towards a more sustainable development means a new plurality of social actors and social movements, which redress the one-sided views of the environment and development toward strategies that express a more ecological, social and cultural reality"

Whilst reshaping the priorities of the nation state combined with placing more emphasis on new policy paradigms at the bottom of the political system, true accountability must also be sought within international institutions. This would encourage greater democracy and transparency within such institutions and curb the power that multi national corporations have over developing countries' natural resources (Karliner, 1997).

While this section merely outlines suggestions for actors within the environmental arena within Central America to move in a more sustainable direction and away from the neoliberal agenda, "it is impossible to draw up a detailed blueprint of a sustainable society or even of the route map to get to it" (Dresner, 2002; 172). Even
though conflicts occur as to how to implement the sustainability agenda, it is crucial that a common ground amongst actors is sought sooner rather than later so that Central America may at least have a chance of saving its natural resources and the people that live off them. In the broader context, therefore, and in the words of an interviewee\textsuperscript{230}, the pursuit of sustainable development “is not only about the environment and the economy, it is also about securing a future for humanity”. Action needs to be taken now before it is too late.

8.5 Possibilities for Future Research

Being such a wide-ranging topic that covers many spatial scales, the possibilities for future research are numerous. From a broader perspective, a particularly interesting way that this research could be taken forward is the consideration of how the debates surrounding sustainable development can be further explored. This thesis focused on the debates within a particular region of the world, however in order to obtain a more complete global picture of how the concept has been and still is interpreted by stakeholders in other regions, it is important to explore the different discourses of sustainable development that occur in different parts of the world. Whilst neoliberalism seems to be the dominant model of development in Central America, perhaps in countries in Africa or Asia other discourses are more dominant. If this is the case, then the way that these countries go about achieving sustainability (if they do at all) could be very different from what has been seen in Central America. Such research would indeed add to the global debate regarding sustainability agendas. Indeed, it might also be interesting to reflect on how neoliberal ideas on sustainable development have been applied in different settings. For example, some argue that neoliberalism has been so destructive in Central America because of the pre-existing inequalities and the authoritarian political culture that has dominated the region for so many years. However, in a more equal society, market-led solutions to environmental issues might be more viable.

\textsuperscript{230} Martin Kappelle, Regional Coordinator The Nature Conservancy - Interview held in Costa Rica on 18th November 2004.
Whilst the research predominantly concentrated on looking at the impacts of a regional sustainability initiative, there was limited time to carry out extensive research at the grassroots level. At the beginning of the research, this regional/national focus was criticised for being too broad. However, whilst such criticisms were taken on board, the author believes that there is a necessity to not just understand processes occurring within a specific community or in a specific area of a country, but to look at a region as a whole and the processes occurring at these levels in order to comprehend ‘the bigger picture’. This comprehension helps to provide the context for work which may be conducted at the local scale. In this way, future research possibilities could include looking in more detail at smaller scale projects at the grassroots level, how they function, which actors are involved and if they can seriously be considered as an effective alternative. For example, in order to deepen the analysis of the MBC, it would be interesting to explore in more detail how the initiative engages with independent NGO projects. Not only would further research like the possibilities suggested above give us a clearer picture as to how the concept of sustainable development has permeated all spatial scales within the Central American region but it would also help to expand our understanding of the concept itself.
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