

Deforestation And Climate Change Reducing Carbon Emissions From Deforestation And Forest Degradation The Fondazione Eni Enrico Mattei Feem Series The Environment And Sustainable Development

Reducing Emissions from Deforestation and forest Degradation (REDD) attempts to address climate change from one angle – by paying developing countries to slow or stop deforestation and forest degradation. Trumpeted as a way to both mitigate climate change and assist countries with development, REDD was presented as a win-win solution. However, there have been few attempts to understand and analyse the overall framework. *Why REDD Will Fail* argues that the important goals will not be met under the existing REDD regime unless the actual drivers of deforestation and forest degradation are diminished. The book delves into the problematic details of the regime, ranging from; national capacity to monitor results, the funding mechanism, the definition of a forest, leakage, and the impetus behind the drivers of deforestation and forest degradation. As the international community rallies around REDD and developed countries and companies are willing to commit substantial amounts to implement the scheme, this book seeks to address whether REDD has the potential to achieve its purported goals. This is an important resource for academics and students interested in the policy and management aspects of mitigating climate change, environmental policy, international relations and development studies as well as policy makers involved in the REDD process.

An area of forest the size of England is cut down in the tropics each year. Forestry is responsible for a fifth of global carbon emissions - more than the entire world transport sector. Urgent action to tackle the loss of global forests needs to be a central part of any new international agreement on climate change. *Climate Change: Financing Global Forests* is an independent report commissioned by the UK Prime Minister to address this vitally important issue. It assesses the impact of global forest loss on climate change and explores the future role of forests in the international climate change framework, with particular emphasis on the role of international finance. It also looks at the economic and policy drivers of deforestation and describes the incentives required to ensure more sustainable production of agriculture and timber in order to meet global demand while reducing carbon emissions. The report draws on a wide range of international expertise and will have significant national, EU and international interest and influence. It includes new modelling and analysis of the global economic impact of continued deforestation and provides a comprehensive assessment of the opportunity and capacity-building costs of addressing the problem. It shows that the benefits of halving deforestation could amount to \$3.7 trillion over the long term. However, if the international community does not act, the global economic cost of climate change caused by deforestation could amount to \$12 trillion. In this comprehensive and detailed report, Johan Eliasch makes a clear and forceful case for forests to be included in international carbon trading mechanisms. He calls for the international community to support forest nations to halve deforestation by 2020 and to make the global forest sector carbon neutral by 2030.

Efforts to mitigate climate change have focused on reducing carbon dioxide (CO₂) emissions into the atmosphere. Some of these efforts centre on reducing CO₂ emissions from deforestation, since deforestation releases about 17% of all annual anthropogenic greenhouse gas (GHG) emissions and is seen as a relatively low-cost target for emissions reduction. Policies aimed at reducing deforestation are central points of a strategy to decrease carbon emissions, reflected in pending legislation in Congress as well as in international discussions, such as the December 2009 negotiations in Copenhagen. This book discusses the linkages between forests and climate, describing the characteristics of the major forest biomes, with an overview of deforestation causes and impacts and approaches to reducing deforestation.

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This book provides a detailed look at REDD+ business case studies and best practice and highlights the future of REDD+ in providing a promising mechanism for financing forest conservation while increasing the sustainability and profitability of forward-thinking companies. How can sustainability leaders reverse tropical deforestation? What exactly are payment for ecosystem

service forest conservation projects, otherwise known as Reducing Emissions from Deforestation and Degradation (REDD+), and how can these projects contribute to business sustainability and profitability? Tropical forests are quickly disappearing – at a rate of nearly one football or soccer field every few seconds. REDD+ simultaneously offers a scalable conservation finance mechanism and a platform for business sustainability. This book focuses on the nexus between tropical forest conservation projects and the sustainability practices of major global businesses. This book contextualizes the issues, defines REDD+ and focuses on its significance to business sustainability including: the role of REDD+ in mitigating global greenhouse gas emissions while reducing business risk to a changing climate; as part of a firm's philanthropic work; a mechanism to increase consumer loyalty; benefitting upstream local communities and ecosystem services; enhancing corporate social responsibility image and upholding corporate principles; and providing unique marketing opportunities and product positioning through private-sector support of charismatic REDD+ projects.

An area of tropical forest the size of England continues to be lost each year. This gives rise to around 17 per cent of global greenhouse gas emissions, greater than global emissions from transport. Addressing deforestation is as essential as decarbonising electricity or transport if the world is to avoid dangerous climate change. A failure to act on deforestation could double the cost of avoiding dangerous climate change to 2030. Deforestation is caused by a range of factors, many of which are exacerbated by a growing global population and increasing consumption. Halting deforestation requires: (a) support for rainforest nations to help them manage their development so that it does not allow continued deforestation; (b) management of the demand for commodities whose production encourages deforestation; and (c) the introduction of a mechanism to pay developing countries for maintaining, and in due course recreating, their forests. The UK needs to act in all three areas if its policies on deforestation are to be successful. Ignoring any one undermines the effectiveness and durability of action in the other areas. As part of this work the Government must: remove subsidies that contribute to deforestation, such as biofuels policy; develop sustainability standards for agricultural commodities; implement and enforce government timber procurement; and, seek an EU-wide ban on illegal timber imports combined with robust sanctions. Illegal timber imports are still a fact of life within the UK timber trade. The economic, environmental and development case for immediate action on deforestation is clear. But success is possible only if the international community works together effectively. Climate change is one of the major global environmental problems, one that has the potential to confront us with great costs during the decades to come. Climate change is caused by emissions of greenhouse gases (GHGs) such as carbon dioxide (CO₂). As deforestation leads to CO₂ emissions and growing forests sequester CO₂, forestry projects provide us with options to mitigate CO₂ effects. This study analyses the contribution forestry projects can make within the context of climate change. The contribution of forestry projects is here discussed on two levels. On a first level, the CO₂ effect of individual projects is analysed. On a second level, the study asks whether the analysis of forestry projects can contribute to questions on climate change which have been discussed in the economic literature during the past two decades. While most studies on forestry projects focus on particular details, predominantly on technical issues, this study takes a rather broad perspective, drawing together different relevant aspects: the stability of international agreements is discussed, costs and benefits of reducing GHG emissions in industrial countries are reviewed, the underlying causes of deforestation are analysed and insights from resource economics are taken into consideration. Such a wide perspective allows the identification, discussion and appreciation of problems and opportunities associated with forestry projects in the context of climate change which are otherwise not recognised.

Global warming through the enhanced greenhouse effect is one of the major and most uncertain forces of global environmental change presently facing the earth. This book is a guide to the scientific and policy debate concerning the roles of agriculture, forestry and other activities leading to global warming. The influence of land use on the greenhouse effect is important, not only in terms of net emissions of greenhouse gases, but also in the potential to reduce emissions through changing land use policies. Land Use and the Causes of Global Warming reviews the global emissions of greenhouse gases from land use sources, highlighting the uncertainties in estimating both the magnitude of the fluxes and the scale of land use change. Policies of afforestation, policies to encourage the halting of deforestation and changing management practices in agriculture are all examined from the perspectives of feasibility, cost and equity. The authors illustrate how all land use policies are multi-objective but that the reduction of greenhouse gas emissions must be a key element in forestry and agriculture policy on a global basis. This is an invaluable book for all those in the climate change research community, environmental scientists, economists and social scientists in research institutions.

Human activities produce large amounts of greenhouse gases (GHGs), primarily carbon dioxide (CO₂), and thus contribute to global warming. The use of fossil fuels is the primary source of CO₂ emissions, but the removal of trees from forested land has also contributed. Mature forests, having absorbed CO₂ from the atmosphere while growing, store carbon in wood, leaves, and soil. That carbon is released when people clear forested land and destroy the wood. From 2000 to 2005, the loss of forests, primarily in tropical developing countries, accounted for approximately 12 percent of global GHG emissions. Slowing or halting deforestation in developing countries is a potentially low-cost way to help reduce global GHG emissions. For that potential to be realized, however, substantial challenges would need to be addressed-by providing technical and financial assistance to governments, by creating demand from private markets, or both.

Report by the Comm. on Climate and Tropical Forests, which was formed in 2009 to ensure effective protection of tropical forests primarily as part of U.S. climate change policies, but also through engagement in internat. agree. The intent has been to create actionable, politically viable recommend. that can inform and guide the U.S. in its legislative and diplomatic negotiations on this issue. Contents: Summary for Policy Makers; Climate Change and Tropical Forests; Financing Forest Emission Reductions; International Cooperation; Designing U.S. Climate Legislation; Incentivizing Local Action; Environ. Safeguards; U.S. Climate Diplomacy and New Agree.; Making U.S. Policies Work Efficiently; A Comprehensive Approach to Land-use Emissions.

The global response to climate change will demand unprecedented international cooperation, deep economic transformation and resource transfers at a significant scale.

Corruption threatens to jeopardise these efforts. Transparency International's Global Corruption Report: Climate Change is the first publication to comprehensively explore such corruption risks. More than fifty leading experts and practitioners contribute, covering four key areas: governance: investigating major governance challenges towards tackling climate change mitigating climate change: reducing greenhouse gas emissions with transparency and accountability adapting to climate change: identifying corruption risks in climate-proofing development, financing and implementation of adaptation forestry governance: responding to the corruption challenges plaguing the forestry sector, and how these challenges need to be integrated into current international strategies to halt deforestation and promote reforestation. The Global Corruption Report: Climate Change provides essential policy analysis to help policy-makers, practitioners and other stakeholders understand these risks and develop effective responses at a critical point in time when the main architecture for climate governance is being developed.

'Deforestation and Climate Change provides a comprehensive overview of the state of play in international regimes, programs and proposals for reducing emissions from deforestation and forest degradation. . . the book brings together a collection of papers canvassing some very important topics, cleverly crafted by the editors to flow rationally from general observations to quite technical evaluation of methods and approaches. It caters for a range of audiences who may have a little knowledge of climate change policy development.' - Matt McIntyre, Australian Journal of Environmental Management

This book contains 28 chapters grouped into six sections providing information on forests interact with the other components of the physical and natural world with the human society, and how we could manage forests globally to make the most of their contribution to mitigation of climate change along with the established objective of sustainable management to maximize the full range of economic and non-market benefits which forests provide. Topics covered include: introduction on the interaction between forests and climate change; climate change, forestry and science-policy interface; forestry options for contributing to climate change mitigation; options for adaptation due to impacts of climate change on forests; current and future policy of national and international frameworks; and implications for future forestry and related environmental and development policy.

The colour of carbon matters. Green carbon is the carbon stored in the plants and soil of natural ecosystems and is a vital part of the global carbon cycle. This report is the first in a series that examines the role of natural forests in the storage of carbon, the impacts of human land use activities, and the implications for climate change policy nationally and internationally. REDD ("reducing emissions from deforestation and degradation") is now part of the agenda for the "Bali Action Plan" being debated in the lead-up to the Copenhagen climate change conference in 2009. Currently, international rules are blind to the colour of carbon so that the green carbon in natural forests is not recognized, resulting in perverse outcomes including ongoing deforestation and forest degradation, and the conversion of extensive areas of land to industrial plantations. This report examines REDD policy from a green carbon scientific perspective. Subsequent reports will focus on issues concerning the carbon sequestration potential of commercially logged natural forests, methods for monitoring REDD, and the long term implications of forest policy and management for the global carbon cycle and climate change.

In this study, the Food and Agriculture Organization of the United Nations (FAO) and the Center for International Forestry Research (CIFOR) teamed up to investigate how transformational change (transformational change) is understood in the scientific literature. The study, the first of its kind to review academic studies on transformational change, focuses on two main questions: (i) What does 'transformational change' mean? and (ii) What drives it?

Intergovernmental fiscal transfers (IFTs) are an innovative way to create incentives for local public actors to support conservation. This book contributes to the debate about how to conserve tropical forests by implementing mechanisms for reducing deforestation and forest degradation (REDD+). With Indonesia as a case study, the authors adopt an interdisciplinary approach, drawing on political science, economics, and public policy. They consider the theoretical justification, as well as the wider political and administrative context for developing the design of IFTs for conservation. Students and scholars looking at conservation, ecological economics, decentralisation, forest policy and climate change will find this book to be of interest. It will also be of considerable use to policy-makers and practitioners working on forest policy, particularly those implementing REDD+.

"The Framework Convention on Climate Change has yet to deal with tropical deforestation although it represents an important source of greenhouse gas emissions. In December 2005 negotiations on a possible regime to reduce emissions from deforestation resume under the impulse of a regime proposal based on the concept of compensated reduction. Over the course of 2006 Panamanian policy-makers working within the National Environmental Authority (ANAM) determine that such a regime is in the interest of Panama given that the integrity of the Kyoto Protocol's existing flexibility mechanisms is protected. However reducing its deforestation rate is not currently possible for Panama due to ANAM's limited institutional capacity to act on the field and limited political capacity to influence the national agenda. Important up-front flows of funds from developed countries combined with the adoption of a progressive project based compensation mechanism could contribute to reverse this trend." --

This resourceful book draws on several case studies to derive implications for the design of Payment for Environmental Services (PES) schemes that are very relevant to current climate change negotiations and the implementation of Reduced Emissions from Deforestation and forest Degradation (REDD) schemes at the national level. With its focus on livelihoods, the book also provides important lessons that are relevant to the design of PES schemes focusing on environmental services other than carbon conservation. Drawing practical lessons for the design of activities aimed at reducing deforestation and forest degradation while benefiting rural people, this book will appeal to academics, practitioners and students involved in the fields of environment and natural resource management, forestry and development studies. This insightful study is accessible also to non-experts in presenting the key issues faced in avoiding deforestation and benefiting livelihoods.

Forests are essential to human and animal survival. Trees produce the oxygen animals need to live. They also provide homes for animals and resources for people. However, Earth's forests are under attack. Deforestation is caused by fires, clear cutting, logging, and climate change. Forests are important to mitigating climate change because they suck up harmful carbon dioxide. Without forests, many plant and animal species would be at risk of becoming endangered or extinct. Complete with manageable text and stunning photographs of forests, both healthy and threatened, this book covers essential concepts featured in elementary earth science curricula.

A search for new methods for dealing with climate change led to the identification of forest maintenance as a potential policy option that could cost-effectively reduce greenhouse gas emissions, with the development of measures for Reducing Emissions from Deforestation and Forest Degradation (REDD). This book explores how an analysis of past forest governance patterns from the global through to the local level, can help us to build institutions which more effectively deal with forests within the climate change regime. The book assesses the options for reducing emissions from deforestation in developing countries under the international climate regime, as well as the incentives flowing from them at the national and sub national level and examines how these policy levers change human behaviour and interface with the drivers and pressures of land use change in tropical forests. The book considers the trade-offs between certain forestry related policies within the current climate regime and the larger goal of sustainable forestry. Based on an assessment of existing multi-level institutional forestry arrangements, the book questions how policy frameworks can be better designed in order to effectively and equitably govern the challenges of deforestation and land degradation under the global climate change regime. This book will be of particular interest to students and scholars of Law and Environmental Studies.

Tropical forests are an undervalued asset in meeting the greatest global challenges of our time—averting climate change and promoting development. Despite their importance, tropical forests and their ecosystems are being destroyed at a high and even increasing rate in most forest-rich countries. The good news is that the science, economics, and politics are aligned to support a major international effort over the next five years to reverse tropical deforestation. *Why Forests? Why Now?* synthesizes the latest evidence on the importance of tropical forests in a way that is accessible to anyone interested in climate change and development and to readers already familiar with the problem of deforestation. It makes the case to decisionmakers in rich countries that rewarding developing countries for protecting their forests is urgent, affordable, and achievable.

Deforestation in tropical rainforest countries is one of the largest contributors to human-induced climate change. Deforestation, especially in the tropics, contributes around 20 per cent of annual global greenhouse gas emissions, and, in the case of Indonesia, amounts to 85 per cent of its annual emissions from human activities. This book provides a comprehensive assessment of the emerging legal and policy frameworks for managing forests as a key means to address climate change. The authors uniquely combine an assessment of the international rules for forestry governance with a detailed assessment of the legal and institutional context of Indonesia; one of the most globally important test case jurisdictions for the effective roll-out of 'Reduced Emissions from Deforestation and Degradation' (REDD). Using Indonesia as a key case study, the book explores challenges that heavily forested States face in resource management to address climate mitigation imperatives, such as providing safeguards for local communities and indigenous peoples. This book will be of great relevance to students, scholars and policymakers with an interest in international environmental law, climate change and environment and sustainability studies in general.

'Forests and Climate Change is an excellent resource on global climate change policy and an insightful introduction to the social dimensions of mitigation strategies, such as REDD+.' - Maria DiGiano, Human Ecology

Governing Climate Change, Second Edition, provides a short and accessible introduction to how climate change is governed by an increasingly diverse range of actors, from civil society and market actors to multilateral development banks, donors, and cities. This updated edition also includes: up-to-date coverage of the negotiations post-Copenhagen (Cancun, Durban, and towards Paris) and some of the shifts in the inter-governmental politics; a deeper discussion of the roles of actors that have come to prominence in the climate negotiations; an overview of the key funding mechanisms such as the Green Climate Fund, Adaptation Fund, the High-Level Advisory Group on Climate Change Finance, and REDD (Reducing Emissions from Deforestation and forest Degradation); a direct assessment of what the proliferation of TCCG (Transnational Climate Change Governance) adds up to in terms of legitimacy, effectiveness etc., drawing on all the recent research in this area; an analysis of renewable energy in the UK (in the light of recent controversies around the siting of wind turbines and fracking projects). Providing an interdisciplinary perspective drawing on geography, politics, international relations, and development studies, this book is essential reading for students and scholars concerned not only with the climate governance but with the future of the environment in general.

Avoided deforestation can be characterized as the use of financial incentives to reduce rates of deforestation and forest degradation, with much of the focus on forests in tropical countries. While avoided deforestation, as a policy issue, is not new, the current debate in academic and policy circles on including it in future climate change mitigation strategies such as the Clean Development Mechanism is gathering pace – and this debate is only likely to intensify as negotiations continue over what should be included in the successor agreement to the Kyoto Protocol, which is set to expire in 2012. Up until now, however, the debate in terms of the scientific and economic implications of avoided deforestation has not been brought together. This book aims to bring together important research findings in the area along with their policy implications, whilst linking avoided deforestation to political economy as well as to the latest developments in environmental and natural resource economics.

Tropical deforestation, fires and emissions: measurement and monitoring; How to reduce deforestation emissions for carbon credit: compensated reduction; Policy and legal frameworks for reducing deforestation emissions.

Forests are critical to mitigation, having a dual role; they function globally as a carbon sink but are also responsible for about 10 to 12 percent of global emissions. Forests and forest products offer both developing and developed countries with a wide range of options for timely and cost-effective mitigation. Afforestation / reforestation offers the best option because of its short timescale and ease of implementation. Reducing deforestation, especially due to the possibility for immediate action. Yet forest contributions to mitigation. Wood products and wood energy can replace fossil-intensive products in other sectors, creating a virtuous cycle towards low-carbon economies. The mitigation potential and costs of the various options differ greatly by activity,

region, system boundaries and time horizon. Policymakers must decide on the optimal mix of options, adapted to local circumstances, for meeting national climate change and development goals. This publication assesses the options and highlights the enabling conditions, opportunities and potential bottlenecks. It will be supported by policymakers, investors and investors in their climate strategies. This publication assesses the options and highlights the enabling conditions, opportunities and potential bottlenecks. It will be supported by policymakers, investors and investors in their climate strategies. This publication assesses the options and highlights the enabling conditions, opportunities and potential bottlenecks. It will be supported by policymakers, investors and investors in their climate strategies.

The Intergovernmental Panel on Climate Change (IPCC) has recently summarized the state of the art in research on climate change (Climate Change 1995). The most up to date research findings have been divided into three volumes: • the Science of Climate Change (working group I), • the Impacts, Adaptation and Mitigation of Climate Change (working group II), and • the Economic and Social Dimensions of Climate Change (working group III) There is a general consensus that a serious change in climate can only be avoided if the future emissions of greenhouse gases are reduced considerably from the business as usual projection and if at the same time the natural sinks for greenhouse gases, in particular that of CO₂, are maintained at the present level or preferably increased. Forests, forestry and forestry industry are important parts of the global carbon cycle and therefore they are also part of the mitigation potentials in at least a threefold way: 1. During the time period between 1980 and 1989 there was a net emission of CO₂ from changes in tropical land use (mostly tropical deforestation) of 2.6 +/- 1 GtC/a, but at the same time it was estimated that the forests in the northern hemisphere have taken up 0.5 +/- 0.5 GtC/a and additionally other terrestrial sinks (including tropical forests where no clearing took place) have been a carbon sink of the order of 1.3 +/- 1.

This publication presents a review of the current state of knowledge of global climate change, as it applies to forest and forest management, in question and answer format. It addresses the dynamic nature of the earth's climate, the greenhouse effect, predicted effects of climate change, the global carbon cycle, trees and forests as sources and sinks of carbon, possible effects of climate change on forests, means of helping forests adapt to climate change and how forests can mitigate predicted effects of climate change. Contents: Chapter 1: The Earth's Climate: A Dynamic Entity; How Are Weather and Climate Defined?, To What Extent Has the Earth's Climate Changed During the Course of Geologic History?, What Changes Have Occurred in the Earth's Climate Since the Beginning of Recorded Human History?, What Factors Can Cause Changes in the Earth's Climate?, Chapter 2: The Greenhouse Effect; What is the Greenhouse Effect and How Does it Influence the Earth's Climate?, Which Gases are Considered to be GHGs and What are the Sources of These Gases?, What is the Significance of Human Sources of GHGs?, Do All GHGs have an Equal Warming Effect?, What Evidence Exists to Support the Idea that GHG Levels in the Atmosphere are Increasing?, Which Countries Presently Make the Greatest Contribution to Elevated Levels of GHGs?, How Can Aerosols Counteract the Effects of GHGs, Chapter 3: Predicted Changes in the Earth's Climate and Expected Effects; In General, What are the Predicted Effects of Increased Levels of GHGs on the Earth's Climate?, How are Changes in the Earth's Climate Predicted?, How Reliable are Present Predictions of Climate Change?, What Changes in Climate are Predicted with a Doubling of CO₂ from Pre-Industrial Revolution Levels?, Is the Climate of Some Regions of the World Expected to Change to a Greater Degree than Others?, What Changes in the Level of the Oceans are Expected Due to Climate Change?, How Will Plants, Including Trees, be Influenced by Changes in the Levels of GHGs in the Earth's Atmosphere and Resultant Changes in Temperature and Precipitation?, How Might Soils be Affected by Changes in Climate?, Is There Any Evidence Which Indicates That Climate Changes May Have Already Occurred Due to Increase in GHG Levels?, Chapter 4: The Global Carbon Cycle; What Processes Exist for the Exchange of Carbon Between the Atmosphere, the Oceans and the Land?, How are Exchanges of Carbon Expressed?, What is the Present Level of Carbon Exchange Between the Atmosphere, the Oceans and the Land?, Chapter 5: Trees and Forests as Sources and Sinks of Carbon; How Much of the Earth's Surface is Presently Covered by Forests and Other Woody Vegetation?, What Processes Occur in Trees and Forests Which Contribute to Changes in Levels of GHGs in the Earth's Atmosphere?, How Much Carbon is Released and How Much is Taken up Annually by Forests?, Do Different Forest Ecosystems Vary in their Capacity to Absorb and Store Carbon?, Do Trees and Forests Remove Carbon from the Earth's Atmosphere at Different Rates During Different Stages in their Lives?, Which Human Activities in Forests and Woodlands Contribute to Increases in the Levels of GHGs?, What are the Current Rates of Deforestation in the World's Forests?, How are Forest Soils Affected by Deforestation?, Chapter 6: Possible Effects of Climate Change on Forests; What Changes in Growth and Yield of Trees and Forests Can be Expected as a Result of Climate Change?, What Changes Can be Expected in the Natural Ranges of Tree Species and Plant Communities Due to Climate Change?, What is the Likelihood that Climate Change Could Threaten Some Species or Plant Communities with Extinction?, How Might Climate Change Influence the Incidence and Intensity of Wildfires?, What are the Expected Effects of Climate Change on Forest Health Including Susceptibility to Pests and Disease or Decline?, Chapter 7: Helping Forests Adapt to Climate Change; How Can we Respond to Predicted Climate Change?, Do Natural Processes Exist Which Can Help Trees and Forests Adapt to a Changing Climate?, How Can Forest Management Help Forests Adapt to Climate Change?, What Can be Done to Help Forests Adapt to Increased Hazards of Wildfire and (or) Pest and Disease Outbreaks Which Could Result from Climate Change?, Chapter 8: The Role Forests in Mitigating the Effects of Climate Change; What Opportunities Do Forests and Forest Management Offer for Mitigating the Effects of Predicted Climate Change?, What Features Should Characterize Actions Taken to Mitigate Potential Effects of Climate Change?, What Additional Research is Needed to More Fully Understand the Potential Effects of Climate Change on Trees and Forests and Forestry and to Develop Adaptation and Mitigation Tactics?, Do International Agreements Exist Which Encourage Development and Protection of Forests to Enhance their Ability to Mitigate the Effects of Climate Change?, How Can the Tropical Forests Action Programme (TFAP) Assist in Developing Forest Sector Programmes to Help Mitigate Effects of Climate Change?, Chapter 8A: Reducing Sources of Greenhouse Gases; What Actions Can be Taken to Reduce the Current Rates of Tropical Deforestation and How Might this Affect Emissions of GHGs from Forests?, What Can be Done to Reduce the Frequency and Scale of Forests and Savanna Woodland Consumed by Biomass Burning?, How Can Increasing the Efficiency of Burning Fuel Wood and Other Biofuels Reduce Emissions of GHGs?, How Can Use of Wood and Other Biofuels in Place of Fossil Fuels Help Reduce the Levels of GHGs in the Atmosphere?, How Can More Efficient Timber Harvesting Operations Reduce Emissions of GHGs from Forests?, Chapter 8B: Maintaining Existing Sinks of Greenhouse Gases; How Can Management and Conservation of Natural Forests Enhance their Capacity to Fix and Store Carbon?, What Uses of Forests and Forest Products are Most Desirable from the Standpoint of Long Term Carbon Storage?, Chapter 8C: Expanding Sinks of Greenhouse Gases; How Much Carbon Can be Fixed in Wood and Soil on a Per Hectare Basis in Forest Plantations in Boreal, Temperate and Tropical Zones?, How Much Additional Area of Forest Plantations Would be Required to Fully Offset Present Annual Increases in GHG Levels from All Sources?, To What Extent are Suitable Lands Available for Afforestation and Reforestation? Where are They?, Other Than Availability of Land, What Other Constraints are there to Large Scale Afforestation Initiatives?, What Assistance is Available to Support Afforestation and Reforestation, Particularly at the International Level?, How Can Agroforestry and Urban Tree Plantings Contribute to the Mitigation of Climate Change?, Is the Planting of Trees Solely for CO₂ Absorption a Sound Policy Considering Other Needs for Available Land?, What Forest Policies Should be Considered at the Country Level to Address the Threat of Climate Change?

Controlling deforestation, which is responsible for about one-fifth of the world's greenhouse gas emissions, has become a major tool in the battle against global warming. An important new international initiative – Reduced Emissions from Deforestation and Forest Degradation (REDD) – provides economic incentives to forest users to encourage preservation of trees. Nearly all Latin American countries are introducing national REDD strategies and pilot schemes. This insightful book raises questions over some of the basic assumptions that underpin REDD policies in Latin America. It raises doubts about whether sufficient account is being taken of the complex social, economic, cultural and governance dimensions involved, advocating a comprehensive 'social development' approach to REDD planning. *Forests and Climate Change* is the first book to comprehensively examine REDD policies across Latin America, including a focus on social aspects. It will prove invaluable for academics and postgraduate students in the fields of environmental studies, environmental politics, geography, social planning, social and environmental impact assessment, development studies, and Latin American area studies. Policy-makers, planners and practitioners working on REDD at national and international levels (both official and NGO sectors) will also find plenty of refreshing data in this much-needed resource.

The aim of this book is to provide an accessible overview for advanced students, resource professionals such as land managers, and policy makers to acquaint themselves with the established science, management practices and policies that facilitate sequestration and allow for the storage of carbon in forests. The book has value to the reader to better understand: a) carbon science and management of forests and wood products; b) the underlying social mechanisms of deforestation; and c) the policy options in order to formulate a cohesive strategy for implementing forest carbon projects and ultimately reducing emissions from forest land use.

Analysing and synthesising vast data sets from a multitude of disciplines including climate science, economics, hydrology and agricultural research, this volume seeks new methods of combining climate change mitigation, adaptation, development, and poverty reduction in ways that are effective, efficient and equitable. A guiding principle of the project is that new alliances of state and non-state sector partners are urgently required to establish cooperative responses to the threats posed by climate change. This volume offers a vital policy framework for linking our response to this change with progressive principles of global justice and sustainable development.

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