

CIFOR's Strategy, 2008-2018

Making a Difference for Forests and People



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Center for International Forestry Research

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Center for International Forestry Research
Jalan CIFOR, Situ Gede
Bogor Barat, 16115, Indonesia
Tel.: +62 (251) 622622; Fax: +62 (251) 622100
E-mail: cifor@cgiar.org
Web site: <http://www.cifor.cgiar.org>

Cover photos by Douglas Sheil and Kristen Evans

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Acronyms

ACIAR	Australian Centre for International Agricultural Research
ADB	Asian Development Bank
AFP	Asia Forest Partnership
ASB	Alternatives to Slash and Burn
ASEAN	Association of Southeast Asian Nations
CARE	Christian Action Research and Education
CATIE	Tropical Agricultural Research and Higher Education Center
CBD	Convention on Biological Diversity
CBNRM	Community-Based Natural Resources Management
CCERs	Center Commissioned External Reviews
CDM	Clean Development Mechanism
CGIAR	Consultative Group on International Agricultural Research
CIFOR	Center for International Forestry Research
COMESA	Common Market for Eastern and Southern Africa
COMIFAC	Central African Forest Commission
COP	Conference of the Parties
CPF	Collaborative Partnership on Forests
CSR	Corporate Social Responsibility
EPMR	External Programme and Management Review
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FLEG	Forest Law Enforcement and Governance
FSC	Forest Stewardship Council
ICDP	Integrated Conservation and Development Project

ICRAF	World Agroforestry Centre
ICT	Information and Communication Technology
IPCC	Intergovernmental Panel on Climate Change
IPGs	International Public Goods
ITTO	International Tropical Timber Organization
IUCN	International Union for the Conservation of Nature and Natural Resources
IUFRO	International Union of Forestry Research Organizations
MDGs	Millennium Development Goals
NGO	Non-Governmental Organisation
OA	Open Access
PA	Protected Areas
PCLG	Poverty Conservation Learning Group
PEP	Poverty and Environment Partnership
PES	Payment for Environmental Services
Polex	Policy Experts Listserv
RED	Reduced Emissions from Deforestation
REDD	Reduced Emissions from Deforestation and forest Degradation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SFM	Sustainable Forest Management
UK	United Kingdom
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
USA	United States of America
WWF	World Wide Fund for Nature

Introduction

Fifteen years ago, a group of visionary women and men created the Center for International Forestry Research (CIFOR) to provide governments, international agencies, NGOs, communities and donors with a new and vital perspective on the world's tropical forests.

Although many link CIFOR's creation to the 1992 Earth Summit because it came into existence the following year, the discussions that led to the founding of CIFOR predated the Earth Summit by several years. In 1991, the Consultative Group on International Agricultural Research (CGIAR) appointed the Australian Centre for International Agriculture Research (ACIAR) as the implementing agency responsible for establishing CIFOR and setting up a Board of Trustees. CIFOR's Establishment Agreement was lodged with the United Nations, and its legal identity as an international organisation was consolidated with a Host Country Agreement between the new Board and the Government of Indonesia in May 1993.

Early in CIFOR's evolution, a decision was taken to focus its research agenda on forest policy research rather than on technical forestry or tree breeding, which were thought to be better suited to national and private-sector research institutes. Instead of having laboratories, CIFOR would be a 'Centre without walls', marshalling interdisciplinary research teams in collaboration with partners to tackle forest policy challenges in an increasingly complex and globalised world¹.

CIFOR's first strategy was articulated in 1996², and charted a course to position CIFOR to fill an empty niche in international research related to forests and forest-dependent people. That strategy proved quite robust, and many of the projects that it launched have subsequently had a significant

¹ For further information on the early history of CIFOR, see *Forests and People: Research that Makes a Difference* (2003).

² <http://www.cifor.cgiar.org/AboutCIFOR/VisionMission/Strategy1996/>

impact on the understanding and practice of forest management throughout the tropics.

Significant changes in CIFOR's external and internal operating environments have occurred during the intervening decade. Externally, forests are taking centre-stage in the international debate on climate change following the 2006 Stern Review³, which asserted that reducing deforestation can be an inexpensive way of reducing greenhouse gas emissions. Dynamic trade and investment patterns have also emerged as a significant driver of deforestation and forest degradation, demanding that CIFOR initiate new approaches, methods and partnerships to remain relevant. New actors and institutions have emerged on the global forest stage – such as international efforts to address illegal logging. With its pioneering research spanning governance, livelihoods and environmental services, CIFOR is ideally placed to provide policy-makers with the multi-disciplinary analyses they need to understand the linkages among such diverse policy arenas as forests, climate change and law enforcement.

Over the same period, CIFOR's internal operating environment has also changed. An unfavourable shift in the balance between unrestricted and restricted funding resources has made it more difficult to conduct global comparative research. Establishment of regional offices has provided a more effective presence outside headquarters for national-level impact, but has also imposed new management and administrative challenges. Experience implementing the 'centre without walls' approach has driven adjustments to CIFOR's partnership model. And in 2002, a new programme structure highlighted the importance of research on forest governance, in addition to research on the biophysical and livelihoods dimensions of forest management.

In 2006, the Center's Board and Management agreed to develop a new strategy for CIFOR to respond better to current and future challenges, and remain a relevant source of timely analysis and knowledge on tropical forests and the people who depend on them. CIFOR's External Programme and Management Review (EPMR) in 2005–6 also recommended that the Center should develop a new strategy as a priority.

Using the strategy framework for non-profit organisations developed by Stanford University's Graduate School of Business⁴, CIFOR embarked in 2007 on an iterative process that encouraged participation by staff, Board members, and key stakeholders, including donors, policy-makers, researchers, opinion leaders and non-governmental organisations at various stages. CIFOR's Board

³ Stern, N. 2006. Stern Review on the Economics of Climate Change. Her Majesty's Treasury, London, UK.

⁴ Strategic Leadership for Nonprofit Organizations, Stanford Graduate School of Business, <http://www.gsb.stanford.edu/exed/sino>

of Trustees endorsed the draft strategy at their meeting in December 2007, and gave final approval at their meeting in May 2008.

While responding to the many changes noted above, the new strategy described in this document maintains significant continuity with the one articulated in 1996. CIFOR continues to aspire to fulfil a unique niche in the global ecosystem of organisations that contribute to improving the policies and practices that affect forests and the people who depend on them.

The Challenges Facing Forest Research

Why Forests Matter

According to the World Bank⁵, over one billion people rely heavily on forests for their livelihoods. Over two billion people, a third of the world's population, use biomass fuels, mainly firewood, to cook and to heat their homes, and billions rely on traditional medicines harvested from the forests⁶. In some 60 developing countries, hunting and fishing on forested land supplies more than a fifth of protein requirements⁷.

Total forest area of the world is just under 4 billion hectares, which represents nearly 30 per cent of planet Earth's area. Approximately 56 per cent of the world's forest resources are located in tropical and subtropical areas. Forest cover is unevenly distributed: only seven countries possess about 60 per cent, 25 countries about 82 per cent and 170 countries share the remaining 18 per cent of the world's forest cover. There are 51 countries with less than 10 per cent of their land covered with forests that are recognised as 'low forest cover countries'⁸. An estimated 12.4 per cent of the world's forest area is located in protected areas as classified by the International Union for the Conservation of Nature (IUCN)⁹.

Planted forests currently cover approximately 3.8 per cent of total forest area, or 140 million hectares. The area of forest plantations has increased by about

⁵ World Bank 2004. *Sustaining Forests: A Development Strategy*. Washington. 80 pp.

⁶ www.un.org/esa/sustdev/natinfo/indicators/methodology_sheets/poverty/without_electricity.pdf

⁷ Mery, G., Alfaro, R., Kanninen, M., and Lobovikov, M. (eds.). 2005. *Forests in the Global Balance – Changing Paradigms*. IUFRO World Series Volume 17. International Union of Forest Research Organizations (IUFRO). Helsinki. 318 pp.

⁸ FAO. 2007. *State of the World's Forests 2007*. FAO, Rome. 144 pp.

⁹ Maini, J.S. 2004. *Future International Arrangement on Forests*. Background Discussion Paper Prepared for the Country-led Initiative in Support of the United Nations Forum on Forests on the Future of the International Arrangement on Forests. 30 pp.

2.8 million hectares per year in the period 2000–2005, 87 per cent of which are productive plantations. Planted forests are currently producing 30 per cent of industrial roundwood, and it is estimated that their contribution will be 75 per cent of the total by 2050¹⁰.

Forests, both natural and planted, make an important contribution to national and local economies. In 2003, the international trade in sawn wood, pulp, paper and boards amounted to almost US\$150 billion, or just over two per cent of world trade, with the developed world accounting for two-thirds of production and consumption¹¹. In many developing countries, forest-based enterprises provide at least one-third of all rural non-farm employment and generate income through the sale of wood products, enriching private companies, governments and rural communities. The global value of the goods and services that forest ecosystems provide – from timber to climate regulation and from water supply to recreation – is estimated to be some US\$4.7 trillion a year¹². The value of the trade in non-timber forest products – for example, pharmaceutical plants, mushrooms, nuts, syrups and cork – has been estimated at US\$11 billion¹³. There is no doubt that many more useful forest products will be discovered in the future.

As significantly, forests provide a range of ecosystem services fundamental to the planet's well-being and environmental sustainability. For example, they play an important role in stabilising soils and protecting land from erosion by wind and water, and they help to maintain a steady supply of clean, fresh water. Forests also support much of the world's biodiversity. Although tropical forests cover less than 15 per cent of the planet's land surface, they contain over half the world's terrestrial species¹⁴.

Trees and forest soils also lock up atmospheric carbon, and forests thus have an important role to play in reducing the concentrations of one of the main greenhouse gases which cause global warming. Deforestation in the tropics is a major source of carbon emissions and an active contributor to global warming. The Intergovernmental Panel on Climate Change (IPCC) estimated that 1.7 billion tons of carbon is released annually due to land-use change, of which the major part is tropical deforestation. This represents 20–25 per cent of current global carbon emissions, which is greater than the percentage from the fossil fuel-intensive global transport sector¹⁵.

¹⁰ FAO. 2007. *State of the World's Forests 2007*. FAO, Rome. 144 pp.

¹¹ World Bank 2004. *Sustaining Forests: A Development Strategy*. Washington. 80 pp.

¹² Costanza, Robert, d'Arget, Ralph, de Groot, Rudolf, Farber, Stephen, Grasso, Monica, Hannon, Bruce, Limburg, Karin, Naeem, Shahid, O'Neill, Robert V., Paruelo, Jose, Raskin, Robert G., Sutton, Paul and van den Belt, Marjan. 1997. *The Value of the World's Ecosystem Services and Natural Capital*. Nature 15 (May).

¹³ World Bank 2004. *Sustaining Forests: A Development Strategy*. Washington. 80 pp.

¹⁴ World Bank 2004. *Sustaining Forests: A Development Strategy*. Washington. 80 pp.

¹⁵ IPCC, 2007. *Climate Change 2007: The Physical Sciences Basis. Summary for the Policymakers*. <http://www.ipcc.ch>.

Processes and trends

Despite the forecasted growth of the global economy and the increased pace of urbanisation, it is clear that even by 2015 widespread poverty will persist, especially in remote rural forest areas. Few analysts and policy-makers now expect the world will meet the Millennium Development Goals within the originally agreed time frame¹⁶.

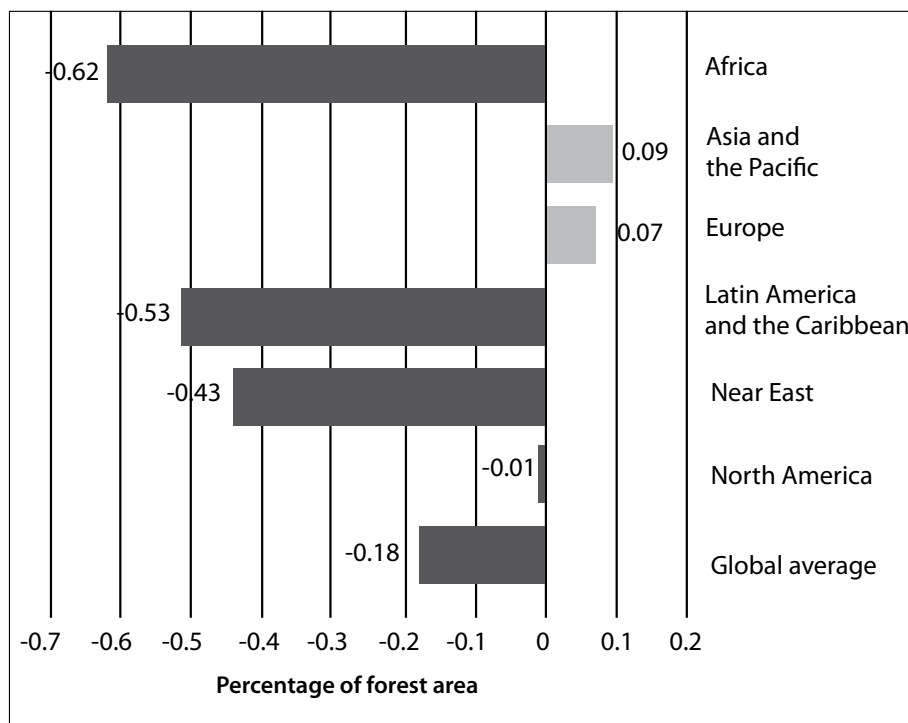


Figure 1. Annual net change in forest area, 2000-2006 (FAO 2007)

According to a recent FAO Global Forest Resource Assessment, the global forest loss is estimated to be about 11 million hectares annually, amounting to a net loss of 7.3 million hectares per year for the period 2000–2005¹⁷. It should be noted that this figure implies a decrease from the period 1990–2000, when the average deforestation was 8.9 million hectares per year. The highest rates of deforestation occurred in South America, with 4.3 million hectares per year,

¹⁶ Mixed progress towards the Millennium Development Goals in the WHO European Region www.euro.who.int/Document/Mediacentre/fs0707e.pdf

UN ECONOMIC COMMISSION FOR AFRICA Statement by Abdoulie Janneh UN Under-Secretary-General www.africa-union.org/root/AU/Conferences/Past/2007/January/summit/speeches/eca.doc

Asian Development Bank Media Release August 16 2006 “Inequality a Major Hurdle to Education, Health MDGs, Says ADB” www.adb.org/Media/Articles/2006/10439-regional-Key-Indicators-2006/

¹⁷ FAO. 2007. *State of the World's Forests 2007*. FAO, Rome. 144 pp.

followed by Africa with four million hectares per year. Forest degradation is caused by human activities that change the structure, composition and integrity of forest ecosystems and can have a serious and negative impact on the utilisation and social role of forests. The pace of desertification in some arid and semi-arid regions is a serious threat to societies and to sustainable use of forest resources.¹⁸

Wood fuel accounts for approximately 15 per cent of primary energy supply in developing countries and up to 80 per cent in some countries in sub-Saharan Africa and Asia¹⁹. Rising fuel prices, growing energy demand, domestic energy security and concerns over global warming caused by greenhouse-gas emissions from fossil fuels have led to the promotion of bioenergy development in general, and biofuels in particular. Past experience provides strong reasons to believe that significant bioenergy development will come at the expense of natural forests, either through direct conversion or indirect competition among various land uses, mainly in developing countries.

On progress towards sustainable forest management (SFM), a few positive advances are evident, but a dominant negative trend prevails: while forest plantations are increasingly managed in intensive ways and conservation efforts are on the rise, tropical primary forests continue to be severely degraded or converted to other uses. Although certification has been in existence for more than a decade, the certified area represents only 7 per cent (approximately 270 million hectares) of the world's forest area, and it is mainly in the temperate and boreal forests. Certification of tropical forest accounts for only 13 per cent of total certified area²⁰. Sustainable forest management remains a challenge within the tropical forests of Africa, Asia and to some extent Latin America.

Agencies responsible for forest policy and forest management in many countries are undergoing restructuring, downsizing and decentralisation. Forest agencies are being merged with other sectors to create larger institutions with combined responsibilities for natural resources, agriculture and industry. A similar trend is discernable in forest research and education institutions. Other significant trends in forest policy and management include a growing involvement of civil-society groups and increasing control of forests by community groups²¹.

Globalisation is strongly influencing the production and trade of forest products. The role of multinational companies has increased through mergers, acquisitions and a sharp increase in foreign direct investments. The pulp and paper industry in particular is quickly turning from a highly fragmented industry into one dominated by large multinationals. Presently the weight

¹⁸ FAO. 2007. *State of the World's Forests 2007*. FAO, Rome. 144 pp.

¹⁹ World Bank 2004. *Sustaining Forests: A Development Strategy*. Washington. 80 pp.

²⁰ World Bank 2004. *Sustaining Forests: A Development Strategy*. Washington. 80 pp.

²¹ Decentralization, Federal Systems in Forestry and National Forest Programs: Report of a Workshop Co-organized by the Governments of Indonesia and Switzerland. www.un.org/esa/forests/pdf/cli/finalinterlakenreport.pdf

of industrial timber production is moving from the North to the South and from West to East, and from natural to planted forests²².

China's rapid economic growth has had a far-reaching impact on the global forest- products trade over the past decade, and this could accelerate in the years ahead. China is currently a major importer of roundwood (mainly from Asia-Pacific, Russia and also from Africa and Latin America) and numerous wood-based products. At the same time, China has become a major exporter of processed wood products, notably wood furniture. A rapid growth of China's and India's domestic demand for forest products is projected²³.

Challenges and opportunities

In the interviews and surveys of CIFOR's stakeholders carried out for the strategy process, the overwhelming majority of respondents cited climate change as the most significant forest-related environment and development challenge today. The second most important issue was changing forest governance, followed by deforestation and the impact of fast-growing economies on forests. Many respondents also noted the many knowledge gaps related to integrated management of complex forested landscapes, less expensive sustainable forest-management practices, and the link between participatory forest management and improved livelihoods.

In the mid-1990s, political interest in forests began waning, and development assistance to the sector peaked at about the same time. CIFOR now finds itself on the cusp of a new era of increased interest in forests linked primarily but not exclusively to climate change. Recent increases in food prices have sparked a growing interest in agriculture that may also result in increased attention to forestry. CIFOR is well positioned to take advantage of these trends for the benefit of forests and people.

²² Matthews, E., Payne, R., Rohweder, M. and Murray, S. 2000. *Pilot analysis of global ecosystems: Forest ecosystems From Forests to Floorboards: Trends in Industrial Roundwood Production and Consumption*. World Resources Institute, Washington. 100 pp. www.wri.org/publication/pilot-analysis-global-ecosystems-forest-ecosystems#

²³ White, W., Sun, X., Canby, K., Xu, J., Barr, C., Katsigiris, E., Bull, G., Cossalter, C. and Nilsson, S. 2006. *China and the global market for forest products: transforming trade to benefit forests and livelihoods*. Forest Trends, Washington 31 pp.

CIFOR's Mission

The strategy process resulted in the following articulation of CIFOR's mission, including its purpose, values, aspirations and vision.

CIFOR's purpose

CIFOR advances human well-being, environmental conservation, and equity by conducting research to inform policies and practices that affect forests in developing countries.

The purpose statement conveys the message that CIFOR's research focuses on objectives related both to people and the natural environment, and is sensitive to inclusiveness in process and achieving equity in outcomes. CIFOR has deliberately chosen a more positive formulation of 'advancing human well-being' rather than 'reducing poverty'. CIFOR's focus is not limited to forestry policies and practices, but extends to policies outside the forestry sector worldwide that affect forests in developing countries.

CIFOR's values

The following values and associated behaviours will guide those who work at CIFOR:

Commitment to impact

- Our research is driven by a commitment to eradicating poverty and protecting the environment.

Professionalism

- We adhere to the highest scientific and ethical standards, and are transparent in our methods and honest in our results.
- We demonstrate accountability to our colleagues and partners.

- We respect organisational policies and procedures, and implement them consistently in a fair and transparent manner.
- We honour individual contributions and dedication to the highest standards of achievement.

Innovation and critical thinking

- We encourage innovative, creative and risk-taking solutions through credible and responsible scientific inquiry.
- We work with enthusiasm and maintain eagerness to learn and to think critically.

Respect and collaboration

- We acknowledge and respect diversity in terms of race, gender, culture, religion and different needs regarding work/family balance.
- We promote equity, empowerment, independence of thought and open participation.
- We treat colleagues and partners with trust, respect, fairness, integrity and sharing of credit.

CIFOR's aspirations

For each of the priority research domains selected to be part of CIFOR's strategy (described below under 'CIFOR's Strategic Research Agenda'), CIFOR has defined a specific goal in terms of the impact to be achieved on policies and practices that affect forests and the people who depend on them. In addition, CIFOR has defined four aspirations in terms of the niche in the global ecosystem of forest research organisations that CIFOR seeks to occupy.

Three of these aspirations relate to substantive areas of research in which CIFOR aspires to be the 'go to' place for anyone seeking understanding of forest-related policy and practice. Interdisciplinary research under each domain is designed to generate the information and analysis necessary to contribute towards achieving one or more of these aspirations. The three topic-specific aspirations, to be progressively attained over the life of the strategy, are as follows:

- CIFOR will become a leading source of information and analysis on the relationships among forests, poverty and the environment, and how management and governance arrangements affect livelihood and conservation outcomes.

- CIFOR will become a leading source of information and analysis on how to harness forests for climate-change mitigation and adaptation.
- CIFOR will become a leading source of information and analysis on the impacts of globalised trade and investment on forests and forest-dependent communities.

In addition, CIFOR has a fourth aspiration, related to CIFOR's commitment to examining the equity dimensions of forest-related policies and practices, and CIFOR's unique 'voice':

- CIFOR's research will become known for analysing and communicating issues in ways that are reliably inclusive of the perspectives of less powerful stakeholders such as women, forest-dependent communities, and developing countries.

In order to achieve these aspirations, CIFOR will need to combine high-quality research with investment in strategic outreach, including keeping abreast of and offering connections to the work of other organisations working in these areas.

CIFOR's vision

CIFOR's vision is of a world in which forests remain high on the world's political agenda, and people recognise the real value of forests for maintaining livelihoods and ecosystems services. In CIFOR's vision, decision-making that affects forests is based on solid science and principles of good governance, and reflects the perspectives of developing countries and forest-dependent people.

CIFOR's Positioning and Comparative Advantage

CIFOR will focus its research and outreach on areas where its singular strengths and expertise are likely to achieve the greatest impact. CIFOR will strive to maintain and build upon the unique qualities, strengths and reputation that distinguish it from other organisations and give it its competitive edge.

CIFOR's positioning and comparative advantage derive from:

- **Brand name:** CIFOR's 'brand' is associated with credible, high-quality analysis, independent thinking, preparedness to tackle difficult and sometimes controversial issues, and the ability to reach and convene diverse actors and stakeholders.
- **Quality of staff:** CIFOR's most important asset is its multi-disciplinary and culturally diverse staff.
- **Partnerships:** As a 'centre without walls', CIFOR has access to the skills and networks of diverse partners operating at local, national, regional and global levels.
- **Global mandate, national relevance:** CIFOR's mandate empowers it to address global issues and gives it the legitimacy to engage in international and national forums.
- **Distinctive perspective:** CIFOR has an interdisciplinary and global perspective informed by the views of multiple stakeholders and a commitment to examining and understanding issues from the viewpoint of poor people and forest users in the tropics.

The following section describes how CIFOR will maintain and enhance these elements of comparative advantage, as well as other elements of its operations necessary to live up to its values and achieve its aspirations.

Reputation for high-quality research

Credibility

Over the next ten years, CIFOR aspires to be the ‘go to’ place for information and analysis about linkages between forests, poverty and the environment; forests and climate change; and the impacts of globalised trade and investment on forests. In addition, CIFOR seeks a reputation for consistently including the perspectives of less powerful stakeholders in the design and communication of its research.

How can CIFOR credibly become the first recourse for researchers, practitioners and policy-makers seeking credible advice on these topics?

Three main attributes underpin the notion of credibility: *believability*, *reliability* and *relevance*. An organisation and its people are believable when they show high-level technical expertise and associated experience, a demonstrated track record of success, integrity and a willingness to stand up for their ideals. The reliability of an organisation is judged by its capacity to follow through on commitments and partnerships, consistency of both effort and output, and dependability and legitimacy of the information and advice it provides. Relevance underpins an organisation’s reason for being – the organisation must be focused on issues regarded as crucial by its key stakeholders (without being excessively donor-driven), and be able to provide the necessary results and advice at the right time in the right format.

Different constituencies measure credibility in different ways. For instance, to the scientific community, credibility is gauged by the quality of the research, with a focus on innovation, objectivity and an established track record of publication in top scientific journals. CIFOR will make greater efforts to achieve high-level scientific publications and consistent quality control.

Policy-makers judge credibility by the quality of the analysis and advice, and its relevance to pressing policy issues. Credibility is enhanced by the ability to participate in decision-making forums and to bring in-depth field-level knowledge to bear on policy questions. The advice should be independent and unbiased. From a donor’s perspective, credibility comes from using limited resources effectively and appropriately, being responsive to current needs, timeliness of response, fostering partnerships to achieve impacts, and the quality and effectiveness of information. Under the new strategy, CIFOR will engage with selected policy processes and utilise donor resources in ways that meet these criteria.

Publications and Data Management

With its focus on natural resources and policy, the international public goods (IPGs) that result from CIFOR's research are different from those produced at many other CGIAR centres.

CIFOR's IPGs fall into three categories:

- Strategic research: new knowledge and synthesis of international significance related to the CIFOR research domains.
- Methodological innovation: methods related to topics tackled in the CIFOR research domains that can be applied world-wide.
- Data: raw data and metadata that can be used by other analysts to derive general patterns and causal mechanisms of global importance.

Publications

To maintain its credibility as a source of IPGs, CIFOR needs to produce more high-quality publications with a catalytic influence on topical debates. Its scientists need to publish more frequently in high-impact journals. Accordingly, CIFOR will be more systematic in assessing scientific publication outlets for their impact potential and ability to reach target audiences and pay more attention to assessing publication performance.

An exciting development in the world of scientific publishing is the Open Access (OA) movement and its aim of making scientific literature freely available. CIFOR will encourage its staff to publish in appropriate OA journals, and enhance its own OA repositories to improve free access, especially for developing countries.

In addition to scientific publishing such as journal articles, book chapters and books, CIFOR will continue to promote the dissemination of results in other forms, as is appropriate for achieving impact. This will include publication in non-English journals, and publication of manuals, policy briefs, CD-ROMs and other relevant products.

CIFOR will seek to improve the quality of its in-house publications, which came under some criticism from external stakeholders in the strategy survey. We will reduce the number of in-house publications and increase the quality.

Data management

In the past, CIFOR has not paid adequate attention to data management, and improved performance was a recommendation of the second EPMR. CIFOR will establish a data repository for its research data and ensure it is enriched with metadata for easy access. The Center will also provide the staff resources, policies, and procedures necessary for ensuring that data is captured, managed and made available to the research community as appropriate.

Integrating gender into the research agenda

Given the greater prevalence of poverty among women and female-headed households, and the significance of gender in forestry activities, CIFOR's second EPMR recommended that CIFOR give greater attention to research that is focused on the impact of forest policy and management on poor women. In the selected research domains there are numerous areas where gender considerations are relevant. For instance, in the domain of small-scale forestry and community forestry, in many circumstances women lose out when commercialisation of forest products occurs. Another example is in the domain of climate-change adaptation, where women's labour is likely to be stretched to the limit as resource scarcity increases, more so than men's. CIFOR will ensure that such issues are identified and incorporated into its research agenda.

CIFOR as an employer

Attracting and retaining high-quality staff

Many of the intentions embodied in CIFOR's strategy will not be achieved without excellent staff. CIFOR will be more proactive in continuously identifying strong candidates for scientist positions, such as cultivating a community of CIFOR associates and collaborators. CIFOR will continually reassess its ability to attract and retain such staff in locations that are not necessarily perceived as providing optimal living conditions.

CIFOR aspires to create a working environment that is excellent in such areas as communications technologies, support staff and library facilities; CIFOR will foster teamwork to provide a creative and stimulating atmosphere; transparent, fair and efficient management processes will be the norm; professional development opportunities will be enhanced; and individual work/life balance needs will be respected. CIFOR will give attention to the numerous human resource issues that need to be tackled by enhancing the profile of the human resources unit within CIFOR.

Mainstreaming gender and diversity into the organisation

CIFOR places great value on maintaining staff diversity and gender balance as they enhance research quality, relevance and impact. To maintain a healthy gender and diversity balance, CIFOR will actively encourage female candidates to apply for vacant posts as well as actively seek candidates from developing country regions through targeted advertising and outreach. The human resources unit will regularly review the Center's gender and diversity plans, and undertake exit interviews and other measures to understand and mitigate associated challenges.

CIFOR's social responsibility

Many public institutions, businesses and civil-society organisations are aware that social responsibility is an essential element of present and future organisational policies. 'Corporate Social Responsibility (CSR)' is essentially a concept whereby organisations decide voluntarily to be accountable for the impact of their activities in the communities in which they operate. Being socially responsible means not only fulfilling legal requirements, but going 'beyond compliance' to invest more in human capital, the environment and relations with stakeholders.

CIFOR's approach to social responsibility will focus on three areas: ensuring CIFOR's research methods and partnership approaches reflect best practices, such as sharing research results with communities, modelling environmental stewardship by undertaking 'greening' activities, and developing partnerships with its neighbouring communities.

Greening activities will focus on the use of energy, water, paper and pesticides and on CIFOR's carbon footprint. CIFOR will set and monitor targets for these areas, as well as implement a carbon offset scheme for air travel and other energy use. CIFOR will also pay greater attention to the neighbouring communities around the CIFOR campus, and invest in closer collaboration with the neighbouring villages and the city of Bogor.

Partnerships

'Centre without walls'

When CIFOR was created, a new type of CGIAR centre was proposed: a 'centre without walls'. The intention was that CIFOR would be lean, leveraging additional research capacity and influence through partnerships outside the Center. An international 'college of scientists' working towards common goals was proposed. In the surveys leading to this strategy, external stakeholders ranked CIFOR's partnership approach high on its list of successes. One visible contribution that partners make to CIFOR's success is through jointly published outputs. In 2005–2006, between 42–47 per cent of CIFOR's refereed publications included developing country partners.

But cracks in the model were also identified. Some partnerships, mainly those with countries and organisations that have greater capacity, worked more or less as they were intended. But in many circumstances, CIFOR found that it had to employ scientists to ensure outputs were produced according to project timelines, and to foster impacts rather than being able to rely mainly on partners. While a 'college of scientists' does exist, and a group of proactive CIFOR associates exists, it is usually CIFOR's scientists who drive the main outputs of the research agenda.

CIFOR remains committed to the concept of a 'centre without walls'. However, it will adjust expectations as to the level and type of work that can be achieved through partnerships. Partnerships will remain key to CIFOR's operations, but it recognises the need to maintain a critical number of high-level scientists on staff to ensure that projects are completed and impacts achieved. CIFOR will work towards a more strategic selection of partners and will aspire to achieving best practice in management of partnerships on a consistent basis.

Enhancing the capacity of partners

Forestry research capacity in developing countries is insufficient to meet the demands of the forestry sector. Many national forest research organisations, for example, have not developed the social-science skills and expertise needed to address contemporary forestry problems. CIFOR has often had to look outside 'mainstream' forestry institutions for research partners with the necessary interdisciplinary focus.

CIFOR has never had a capacity-building unit and does not plan to create one. The capacity-building needs of developing countries are enormous, and CIFOR is too small an organisation to make a significant impact. CIFOR sees capacity-building as a valid component of its impact orientation, to be applied in selective cases where capacity has to be built first if impact is to be achieved, and where this can be done by CIFOR in a cost-effective way. In the context of its research partnerships, CIFOR will build capacity where appropriate, usually through 'learning-by-doing' rather than through more formal capacity-building activities such as training courses or academic degrees.

Relationships with key partner organisations

CIFOR occupies a niche in the broader ecosystem of organisations that are involved in forest research. CIFOR's research focuses on informing the policies and practices that affect forests in developing countries. To have significant impact, CIFOR recognises that it is important to establish strategic relationships with a range of partners at the national, regional and international levels.

An example of one such partnership at the global level is the Collaborative Partnership on Forests (CPF). The CPF is an informal, voluntary arrangement among 14 international organisations and convention secretariats, collaborating to build on their experiences to solve problems related to forest management and conservation and the production and trade of forest products. An example of a partnership at the regional level is the Asia Forest Partnership (AFP), which promotes SFM in Asia.

The three relationships described below are particularly important for CIFOR. They provide a scientific, funding, institutional, collaborative and

legal framework that enhances CIFOR's role as a global player in meeting challenges related to forests.

CIFOR and the CGIAR

CIFOR was created under the umbrella of the Consultative Group on International Agricultural Research (CGIAR). Being part of the CGIAR confers many benefits: close proximity to CGIAR global networks; partnerships with other centres; access to services such as advice on intellectual property, internal audit, gender and diversity, and impact assessment; and preferential status for co-location with other CGIAR centres. Most importantly, a significant portion of CIFOR's funding comes from CGIAR sources. Without the CGIAR, CIFOR would find it very difficult to secure its current level of 45–50 percent of its annual budget in unrestricted funding. Similar organisations outside the CGIAR are not able to attract such a high share of unrestricted funding.

There are also some downsides to being part of the CGIAR, which CIFOR will continue to manage. In some environments, the CGIAR is perceived as a club of élite agricultural research centres, a view that breeds a lack of trust in the system, especially within the NGO community. In addition, the governance of the CGIAR has tended to be dominated by the interests and needs of the older and larger commodity centres rather than the newer and smaller centres focused on natural resources management.

A challenge that CIFOR faces given its small size relative to other centres is that the administrative demands of the CGIAR are as great as those faced by centres three times its size. These demands require both big and small centres alike to meet the fixed transaction costs related to Medium-Term Plans, External Programme and Management Reviews (EPMRs), Center-Commissioned External Reviews (CCERs), annual Performance Measurement, Challenge Programs, and monitoring and engaging in system reform, not to mention participation in various CGIAR-related meetings. CIFOR will work to reduce the transaction costs through strategic partnerships with other centres, and more selective engagement in system-wide initiatives.

CIFOR and the World Agroforestry Centre (ICRAF)

With CIFOR's emphasis on forest systems and ICRAF's on trees in agricultural landscapes, there are huge opportunities for collaboration between the two centres. Over the past ten years, the two centres have collaborated effectively in joint programme development and project implementation, including the Joint Biodiversity Platform, the Alternatives to Slash and Burn (ASB) initiative, and the Amazon Initiative; joint staff appointments; cross-Board representation; joint publications and outreach activities; and shared facilities in Bogor. In 2005, the two centres jointly examined their partnerships and identified opportunities for a stronger alliance.

CIFOR is committed to enhancing its alliance with ICRAF in a manner that is mutually beneficial, minimises transaction costs, increases effectiveness and efficiency, and adds value to the research portfolio of each centre. CIFOR further recognises ICRAF's unique and complementary strengths and the potential synergies that such an alliance could develop to tackle emerging challenges such as climate change.

CIFOR and the Government of Indonesia

The Government of Indonesia has been a generous host to CIFOR since the Center established its headquarters in Bogor in 1993. The relationship with the host country is defined by the fact that CIFOR is an international research organisation with a mandate to generate global public goods while endeavouring to support the country's national forest policy research agenda and capacity building needs. CIFOR will continue to work closely with its host technical ministry – the Ministry of Forestry – to identify potential areas of collaboration in research and outreach. CIFOR recognises that its research results may very occasionally cause some concern for its host, and is therefore committed to ongoing engagement to ensure that the Center's research is accurate and to minimise unpleasant surprises from CIFOR's outreach efforts.

As Indonesia takes a more prominent leadership role in global forest policy arenas, CIFOR is prepared to support national policy-makers and opinion leaders by providing sound information and analysis derived from its work in Indonesia and around the world.

Global mandate, local relevance

Influencing the global agenda while ensuring national relevance and impact

CIFOR is committed to producing IPGs that influence the global forest agenda and have a positive impact on the world's forests and its people. For a small organisation with approximately 50–60 globally and regionally recruited scientists, this is a significant challenge. CIFOR will thus focus its attention on a limited number of research domains so as to concentrate effort and enhance the likelihood of impact.

Global themes and IPGs will drive CIFOR's research agenda around the world. CIFOR has chosen to organise its research around research domains, rather than regionally, so that research teams are clearly focused on the IPGs rather than on regional priorities where research agendas may compete with those of national and regional players. However, the focus themes within the domains have to be informed by the realities on the ground in numerous tropical countries.

When CIFOR began, the premise was that by operating at the global level (based on locally grounded research), CIFOR would be able to influence the behaviour of key international donors and international NGOs, which also operated globally as well influenced forestry and environmental and development policies in many countries. Analysing CIFOR's past impact indicates that this premise was partially flawed. Many of the significant impacts achieved that can be easily attributed to CIFOR were a result of detailed work at the national level by CIFOR and its partners. In addition, working continuously at the local level is necessary to provide a reality-check on recommendations at the more aggregated level. At the same time, some of CIFOR's key higher-level impacts will continue to be less directly attributable due to the increasing complexity of the impact pathways in which it operates. Achieving the right balance between work at the global level and work at more local levels will remain a significant challenge.

Strengthening the headquarters

The headquarters in Bogor, Indonesia are crucial to CIFOR's operations given the commitment to global impact and the production of IPGs. In spite of improvements in information technology, there is still a need for a core group to be able to have regular in-depth face-to-face interaction and discussion. The headquarters will also continue to service many of the administrative and information needs of outposted scientists.

Accordingly, re-establishing a critical mass of globally recruited staff in Bogor will be a priority. This is needed to develop programme content, guide implementation of the strategy, respond to rapidly emerging opportunities and host the numerous partners that visit headquarters. Achieving critical mass will require not only increased numbers of staff who are good team players, but cultivation of an organisational culture that values networking, partnerships and internal communications.

Outposted scientists

CIFOR will concentrate its work in four 'regions': the Amazon Basin, the Congo Basin, South East Asia and dryland Africa. Through its activities in these regions, CIFOR will work on issues where the bulk of the humid and dry forests is located, and where hundreds of millions of poor and/or marginalised people live. The focal countries are determined by the research agenda and can be expected to change over time.

CIFOR is committed to having a presence in its priority regions, and this presence may be through outposted staff as well as through partnerships. Being locally and nationally embedded enhances CIFOR's credibility – CIFOR is seen to be part of local and national activities, and not 'fly in and fly out' scientists. Outposted staff can better understand the emerging policy processes, recognise the field realities, enhance partnerships and capacity, and tailor research questions to local and national contexts.

However, as a small organisation, CIFOR cannot be located everywhere. The principles that will drive decisions regarding when and where CIFOR should base its staff in the regions include the presence or absence of appropriate partnership opportunities, the efficiency and effectiveness of conducting research, capacity-building opportunities and constraints, availability of resources, and opportunities for impact.

Where CIFOR has major research activities in a country, the first recourse will be to conduct these activities through partners. In some cases, partners will be unable to meet CIFOR's needs, such as in places where capacity is extremely limited, and effective CIFOR research will require outposted scientists.

In the first instance, and where possible, outposted scientists will be placed within partner organisations to enhance partnerships and reduce administrative problems associated with small offices. In some cases, administrative efficiency will be better served through location in a sister CGIAR centre. Only in exceptional circumstances will CIFOR open its own offices. In those locations where there is significant CIFOR activity in a number of research domains, and where there are regional processes of extreme importance, CIFOR will consider establishing or maintaining a regional office.²⁴

Wherever CIFOR has an office, greater attention will be paid to ensuring that the Center has a proper legal basis, banking is conducted according to the highest financial standards, and employment of local staff is in accordance with national labour laws. CIFOR will ensure that outposted staff will have adequate operational support to enable them to conduct high-quality, cost-effective research.

Given funding opportunities and uncertainties, and the emergence of new possibilities for impact, CIFOR will maintain a flexible approach to its presence globally. While having a presence in a country inevitably produces expectations amongst partners, CIFOR will need to maintain options to enlarge, downsize or close its operations in specific countries, being aware of the transactions costs of such changes.

Funding for maintaining outposted staff and other operations outside headquarters will be made on the basis of strategic decisions in relation to impact pathways. Outposted staff will work within research domains and belong to teams that contribute to IPGs. CIFOR will ensure that outposted scientists do not undertake work that would more appropriately be done by national partners.

²⁴ For example, CIFOR's regional office based in Cameroon meets this test, because a variety of Congo Basin initiatives and a number of large CIFOR projects are unfolding in the region.

CIFOR's impact orientation

CIFOR's research is classified as 100 per cent policy-oriented by the CGIAR, yet the design of its policy engagements has been relatively ad-hoc and its policy influence has often been difficult to assess. Given CIFOR's desire to have widespread impact from its research, CIFOR is committed to supporting institution-wide efforts to understand policy processes globally, identifying policy processes that CIFOR is best placed to influence in each region, and strategically positioning CIFOR and our partners within these processes. In addition, CIFOR will distil lessons from the literature and prior CIFOR efforts to influence policy on what works best and under what conditions, and generate an institution-wide understanding of alternative models for strengthening the relationship between science and policy.

Finally, CIFOR will support stronger project design, so that the chances for policy influence are heightened, namely by: supporting early, institution-wide engagement on timely global policy processes; supporting clear articulation of policy goals within research programmes; supporting clear articulation of ex-ante impact pathways based on a clear rationale, policy intelligence and lessons learned on 'what works'; and supporting budgeting and budget allocation processes that recognise the need for sustained policy engagement.

Research-development continuum

While CIFOR seeks to contribute through research to development outcomes in specific countries or locations, CIFOR's research is primarily designed to generate knowledge of an international public goods nature. CIFOR has been and will continue to be positioned within the research side of the research-development continuum. By collaborating with civil-society organisations, development agencies and other stakeholders, CIFOR seeks to cultivate channels through which its research results can be translated into development outcomes without necessarily having to engage in the direct implementation of development activities. The presence of strong partners to span the research-development divide has been an important consideration for the design and location of most of CIFOR's research. This approach has worked well and will continue to be used in the future.

There will be continuing demands from different stakeholders for CIFOR to engage in development activities in specific locations. CIFOR will exercise discipline in responding to such demands, and will only consider opportunities that are central to research objectives and in line with impact pathways. On occasion, in the absence of suitable partners and collaborators, CIFOR may engage in development activities as part of an action research-learning process. CIFOR may also engage in the assessment, development and testing of best practices in certain locations. However, such development activities will be time-bound, part of a clear strategy for impact, and integral to research on a high-priority topic.

Maintaining CIFOR's Independence

Resource mobilisation

Underpinning all of the strategy's aspirations is effective resource mobilisation. Between 2000 and 2007, CIFOR's overall revenue grew by about 45 per cent, with the unrestricted share between 45 and 50 per cent. About 75 per cent of CIFOR's budget for research activities was derived from restricted sources during that period. Relying on restricted funding for half the overall budget and three-quarters of the research budget poses the risk of research being unduly influenced by donors' priorities, rather than reflecting CIFOR's mission, objectives and comparative advantage. In addition, restricted projects often require in-kind support, such as counterpart commitments or informal subsidies from unrestricted funds.

CIFOR will maintain or increase its ratio of unrestricted to restricted funds and the diversity of its funding sources. As a result of the limited potential to increase the percentage of unrestricted funds as a total of the budget, only a small amount of overall growth in the Center's budget may be realistically expected. Nevertheless, some growth is both possible and desirable. CIFOR will also focus on 'semi-restricted' funds through marketing CIFOR research domains rather than specific research projects. Given the trade-offs that need to be made in resource allocations, CIFOR will embark on a more conscious, strategic allocation of unrestricted funds than was apparent in the past. Correspondingly, CIFOR will also be more selective in its acceptance of restricted projects, and increase its indirect cost recovery.

Partnerships with the private sector

CIFOR does not have a particularly strong history of partnership with the private sector, though several research efforts have been undertaken in collaboration with companies.²⁵ The relationship between CIFOR and private companies is not always simple. To some extent, CIFOR provides information that could directly benefit companies. On the other hand, it also often provides information to governments, NGOs and the media that some companies would prefer not to be public. CIFOR recognises the dual nature of its relations with the private sector and tries to address it by being clear and transparent about its objectives and activities, by treating the companies and their staff with respect, and by keeping its word when commitments have been made.

CIFOR plans to increase its fund-raising efforts with the private sector. Receiving funds from the private sector can come with significant risks that need to be managed. The corporate record of the donors has to be examined,

²⁵ See paper prepared for the Spring 2005 BOT meeting entitled: 'CIFOR and the Private Sector: A Discussion Paper'.

and any conditions that come with their funding have to be considered. In most cases, private-sector funds should be unrestricted to minimise real or perceived conflict of interest. CIFOR will not accept money from private companies for research where that might create the reasonable perception that the donations could bias research outcomes.

CIFOR will not enter into contracting partnerships with the private sector where CIFOR experts are contracted to private companies. These kinds of partnerships are unlikely to yield international public goods (IPGs). However, CIFOR is open to opportunities to increase strategic research partnerships with the private sector, where the research is expected to produce IPGs and impacts that advance CIFOR's mission.

CIFOR's commitment to effective outreach

Driven by a proactive communications strategy, CIFOR has in its first 15 years been at the forefront of international forestry discussions, often setting the agenda and providing science-based messages to policy-makers and practitioners. The essence of CIFOR's communications strategy has been to identify the key messages and target audiences for a particular piece of research, and work out a clear dissemination plan to reach those audiences. Communication is treated as a strategic aspect of CIFOR's work rather than an add-on at the end of a research undertaking. To remain a leader in the international forestry arena, CIFOR must maintain its competitive advantage in communications and outreach. At the same time, to maintain credibility, CIFOR must ensure that its outreach messages are solidly founded in research findings.

Research-advocacy continuum

CIFOR will continue to provide credible, high-quality information to a range of stakeholders, especially policy- and decision-makers. In order to enhance the impact of its research, CIFOR's engagement with the policy process will be more strategic and proactive. While CIFOR will continue to refrain from taking particular positions on issues of policy, it will ensure that relevant research results and their implications inform policy discussions and decision-making.

Strategic communications and media outreach will remain important vehicles for pursuing policy impacts and will be grounded in solid research. CIFOR's level of policy engagement and media outreach on any particular issue will be commensurate with the depth of CIFOR's research and programmatic focus on the topic and decisions based on its strategic value to the Center and its mission at the time.

Beyond publications

As noted above, CIFOR's credibility depends on frequent publication in high-impact journals. In addition, CIFOR will continue to make use of a broad variety of outreach tools.

Media

CIFOR's investment in cultivating a media presence has been premised on the assumption that influential policy-makers tend to pay more attention to research results encountered through media reports rather than through traditional scientific outputs. CIFOR will continue its use of traditional media approaches, but will give more relative emphasis to activities aimed at new web-based media outlets, and invest in the necessary skills and infrastructure to be effective in those activities.

Website

CIFOR's web presence is essential in positioning the Center as a credible and important source of information on global forest issues for researchers, policy-makers, opinion leaders, students and the media.

The Web has overtaken print as the main vehicle for disseminating and accessing scientific publications. In 2006, there were 300,000 file downloads (mostly publications) directly from the CIFOR's website and through Google Books, in contrast to 15,000 printed copies distributed throughout the year.

The website will be a major vehicle to achieve CIFOR's aspiration of becoming the 'go-to' place on a number of topics, and CIFOR will make the necessary investments in skills and infrastructure.

Polex

The Forest Policy Experts Listserv (Polex) reaches thousands of readers and has been highly regarded for its precise, succinct and attractive commentary on forest issues. Various surveys have consistently shown Polex to be the most popular CIFOR communications tool among CIFOR's key constituencies. Polex readers appreciate the timeliness of the topics it covers, its informality and its succinct and accessible writing.²⁶ The challenge for Polex in the coming years is to maintain its reputation, both in content and style, as well as encourage discussion on the topics it highlights among a wide range of readers.

Events

CIFOR has used key international events to convey relevant research results to policy-makers, and to make substantive contributions to international processes that affect forests. Participation in important events has also helped CIFOR to raise its profile as a credible player in the international forestry

²⁶ See survey by Spilsbury and Haase (2005).

arena. CIFOR will target key international events and showcase research relevant to the issues being addressed at these events. It will also continue taking advantage of relevant international and national events to create awareness about important forest issues and how CIFOR's work is helping to address them.

While specific outreach strategies will be governed by the impact pathways specified in the research domains, CIFOR will make a commitment to service the needs of some key international institutions and initiatives, in terms of position and background papers on topics in CIFOR's research portfolio, and attendance at key meetings.

Information and communication technology (ICT)

Progress in ICT continues to offer new opportunities for organisations to do business differently – be it to increase internal efficiency, respond to the needs of their customers, or create an enjoyable work environment for their employees. Anytime, anywhere computing, high-speed connections, video and teleconferencing, and Web2 technologies offer tremendous possibilities for increasing productivity, and enhancing interaction and the effectiveness of externally oriented communications while facilitating flexible work styles internally..

CIFOR will invest in enhancing the ICT skills of its staff and the tools that they need to take advantage of new technology options, and devise ways that will make CIFOR more effective and efficient. The main ICT areas where CIFOR will invest in the next 5–10 years are:

- High-speed Internet connectivity at headquarters and outstations to remove bandwidth constraints;
- Enhanced ICT skills of staff;
- Enhanced ICT support for outposted scientists;
- Improved availability and use of electronic library resources;
- Deployment of Web2 technologies (wikis, blogs, collaborative tools) and standards to facilitate information and knowledge sharing internally and externally;
- Cost-effective communication technologies such as video conferencing and Internet telephony (such as Skype) as primary vehicles for remote one-to-one and group interaction;
- Development and seamless integration of information systems supporting management processes (project management, resource mobilisation, budgeting, finance, human resources and document management); and
- Data management and archiving for various types of research data.

CIFOR's Strategic Research Agenda

Priority-setting process

In order to increase the chances of achieving impact, CIFOR will focus its research agenda on a limited number of 'research domains'. These domains are not defined by disciplinary focus, but instead map to external policy arenas and/or practitioner communities that CIFOR seeks to influence. For an organisation the size of CIFOR, available resources can support effective research in no more than six such domains at any one time.

CIFOR began the process of selecting priority research domains by seeking ideas from staff, Board members and external stakeholders. This input was consolidated into a 'long list' of 13 candidate research domains. To help reduce the list down to six, CIFOR applied the Delphi approach to priority-setting, with reference to a set of criteria identified by CIFOR scientists and management (see Box 1).

At the end of the priority-setting process, six research domains were selected for inclusion in CIFOR's future research agenda:

1. Enhancing the role of forests in climate mitigation (with a focus on REDD)
2. Enhancing the role of forests in adaptation to climate change
3. Improving livelihoods through smallholder and community forestry
4. Managing trade-offs between conservation and development at landscape scale
5. Managing the impacts of globalised trade and investment on forests and forest communities
6. Sustainable management of tropical production forests.

Box 1. Criteria used to prioritise research domains²⁷**Criteria related to CIFOR and the external environment**

Political feasibility: prominence on the public agenda; demand for research on the issue; existence of relevant policy processes that might use the outputs

Legitimacy and support (fundability): fit within CIFOR's mandate; existence of social and political support to function effectively within this area; availability of funding for this kind of work

Promotion and enhancement: potential to raise CIFOR's profile; existence of a niche for CIFOR's leadership in the area; potential to increase CIFOR's capacity

Organisational credibility and capacity: CIFOR's credibility in the area; potential for CIFOR to define the research agenda; CIFOR's ability to mobilise resources, partners and organisational framework to achieve impact in the area

Criteria relating to the research domain

Justice/equity consideration: opportunity to enhance the equity of outcomes; magnitude of improvements in the equity of decision-making; opportunity to amplify the voices of women, minorities or other disadvantaged or marginalised groups

Contribution to human well-being: likely magnitude of impact on specific target groups

Expected economic benefits: magnitude of economic benefits (area, number of people)

Environmental benefits: magnitude of environmental benefit (e.g. increasing forest cover, carbon storage, biodiversity, water quality and yield, and soil fertility and integrity, etc.)

Geographic relevance: how widely applicable will the outputs of work in this domain be?

Novelty/innovation: Scientific importance; potential for introducing new thinking and action on the issues

²⁷ The criteria were also made available to the Delphi panel members to consider, but they were not required to score the domains against the criteria.

Examples of candidate domains not selected included ‘Putting forests to work for water resources management’ and ‘Harnessing industrial-scale forest plantations for sustainable development’.

Undertaking the priority-setting process revealed the need to assess the gap between the changing societal demands placed on the forestry sector and the forestry sector’s current institutional arrangements and capacities. Addressing this need is an important research area and will be incorporated as a cross-cutting theme into our research agenda.

Priority research domains

The six priority research domains are detailed below.

The description of each domain includes the following information:

- Background
- Goals
- Impact pathways
- Research themes
- Geographic focus.

Translation of the research domains into research activities will be sequenced in line with available human and financial capacity, and will build on past experience. Accordingly, research in all six domains will not start with the same level of intensity. In addition, the domains are not mutually exclusive as there are links between them, reflecting the cross-sectoral and non-discrete influences on forests and the corresponding interdisciplinary nature of modern forest management. Where these convergences occur and how they will be managed are shown in Table 1.

Table 1. Synergies Among Research Domains

Domain	Domains with Cross Linkages	Comments on Linkages
1. Enhancing the role of forests in climate mitigation	4. Managing trade-offs between conservation and development at landscape scale	Opportunities for joint research on Payments for Ecosystem Services (PES) Possibility of sharing research sites
	5. Managing impacts of globalised trade and investment on forests and forest communities	Opportunities for joint research on bioenergy
	6. Sustainable management of tropical production forests	Opportunities for joint research on forest degradation
2. Enhancing the role of forests in adaptation to climate change	1. Enhancing the role of forests in climate mitigation	Opportunities for joint research on climate change mitigation and adaptation
	6. Sustainable management of tropical production forests	Opportunities for joint research on integrating adaptation into forest management practices
3. Improving livelihoods through smallholder and community forestry	6. Sustainable management of tropical production forests	Opportunities for coordinated research on technical options to improve forest productivity
4. Managing trade-offs between conservation and development at landscape scale	1. Enhancing the role of forests in climate mitigation	Opportunities for site-specific synergies in research on the role of PES in climate adaptation and mitigation
	2. Enhancing the role of forests in adaptation to climate change	
	3. Improving livelihoods through smallholder and community forestry	Opportunities for joint research on how to negotiate trade-offs associated with production forest management
	6. Sustainable management of tropical production forests	
5. Managing impacts of globalised trade and investment on forests and forest communities	1. Enhancing the role of forests in climate mitigation	Opportunities for joint research on the role of carbon finance in shaping outcomes for forests and forest communities
	4. Managing trade-offs between conservation and development at landscape scale	Possibility of sharing research sites to examine the impacts of trade and investment at the landscape level
	6. Sustainable management of tropical production forests	Opportunities for joint research on the linkages between illegal logging and investments in wood processing capacity and plantation development
6. Sustainable management of tropical production forests	1. Enhancing the role of forests in climate mitigation	Opportunities for joint research on forest management for REDD
	3. Improving livelihoods through smallholder and community forestry	Opportunities for joint research on forest management techniques
	4. Managing trade-offs between conservation and development at landscape scale	Opportunities for joint research on platforms for negotiating trade-offs

Enhancing the role of forests in climate mitigation

Background

Land-use change through deforestation is a significant source of carbon emissions and an active contributor to global warming. Deforestation is estimated to have contributed 1.6- 5.9 gigatons of carbon per year in the 1990s. This represents about one-fifth of current global carbon emissions, which is greater than the amount from the fossil fuel-intensive transport sector. Emissions from deforestation in Brazil and Indonesia alone are equivalent to the entire reduction commitment of the Annex 1 countries during the first commitment period of the Kyoto Protocol. Finding ways to maintain terrestrial carbon pools and to reduce carbon emissions from land-use change will be a key element in future negotiations of the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol, which expires in 2012. These negotiations could have significant implications for the forestry sector, land use and rural livelihoods in many developing countries.

Understanding the drivers of deforestation and forest degradation has assumed renewed importance as the attention of policy-makers and the general public has refocused on forests due to their newly appreciated linkages to climate-change mitigation and adaptation. One reason is the October 2006 release of the Stern Review, an analysis of the economics of climate change published by the Government of the United Kingdom. The Review emphasises the prevention of further deforestation as one of four 'key elements' of future international climate frameworks.

In the meantime, in response to calls from a number of parties to revisit deforestation in the climate agenda, the Eleventh Session of the Conference of Parties (COP11) to the United Nations Framework Convention on Climate Change (UNFCCC) in December 2005 initiated a two-year process for the consideration of a policy for 'reduced emissions from deforestation' (RED) in developing countries. A decision reached at COP13 encouraged parties to begin experimentation with REDD (with the second 'D' added for 'degradation'), and initiated a programme of work to address methodological issues.

Negotiations toward a post-2012 climate governance regime bring avoided deforestation to the centre of the international agenda. There is a need further to reinforce measures aimed at managing and expanding forest carbon pools by SFM, reduced forest degradation and management of tropical peat-lands. There are also possible synergies between managing forest carbon and other ecosystem services, and climate change adaptation measures.

The key issues to be addressed by research on the role of avoided deforestation in climate mitigation include the need for standardised, widely accepted, credible and scientifically sound methodologies for measuring and monitoring

reduced emissions from deforestation and other land-use change. Such methodologies should be cost-effective so as to elicit broad participation by countries that have significant amounts of forested area storing large carbon stocks. In addition, methods are needed to broaden the concept of SFM to include the management of forest carbon pools as an explicit additional objective and to manage forests more effectively for multiple goods and services, including carbon sequestration.

To inform negotiations at the global level, research is needed on how countries with very different forest and economic conditions could engage with and benefit from a carbon- offset compensation regime. At the national level, research can inform the design and implementation of REDD schemes, taking into consideration institutions, land ownership and access rights, equity and benefit sharing, and rights of indigenous peoples and local communities.

Goal statement

CIFOR's goal is to ensure that the international post-2012 climate regime and national-level REDD schemes are designed in such a way as to ensure that forest-based emissions reductions are efficient, equitable and provide benefits to affected communities in developing countries.

Within four years, CIFOR's research will have informed negotiations toward a global REDD regime, and will have contributed to the design and implementation of national-level REDD schemes so that they meet these criteria. Within five years, CIFOR aspires to influence national-level REDD policies and strategies in at least five countries.

Impact pathways

CIFOR aims to inform and influence national, regional and global policy processes and ensure that stakeholders have access to the best available science-based knowledge and information on forests and climate-change mitigation.

At the global level, CIFOR's main impact pathway will be through direct and indirect engagement with global climate policy processes, including the IPCC and UNFCCC/SBSTA, and by influencing institutions, including the World Bank's Forest Carbon Partnership Facility, the European Commission and donor governments. CIFOR will offer to these policy processes and institutions the results of comparative studies (e.g. across REDD demonstration activities) on the implications of different policy measures, specific mitigation activities (such as payments for environmental services), and different approaches to baseline development and monitoring.

In a limited number of countries, CIFOR will seek impact on national-level policies through collaborative research and partnerships with research institutes, relevant governmental partners and NGOs to support informed engagement in national-level policy arenas. Content will be derived from specific case studies of domestic REDD schemes, as well as the implications of global comparative research for challenges faced in those countries.

Both global comparative studies and national-level work will be carried out seeking collaboration and complementarity with research institutions and other relevant partners, such as ICRAF (in the context of mitigation in agricultural landscapes) and FAO (in the context of national forest programmes and forest resources assessment), and through networks strengthening South-South cooperation in research.

Research themes

1. Procedures and best practices for estimating and managing carbon stocks in tropical forest landscapes

Research under this theme will contribute to the development of standardised, widely accepted, credible and scientifically sound methods for measuring and monitoring carbon emissions from deforestation and forest degradation as a basis for compensating reductions in such emissions from developing countries. CIFOR will contribute to the development of best practice methods for establishing baselines against which progress can be measured, and cost-effective systems for tracking the changes in the carbon pools of different types of forests, including peat forests. Research on this topic will include both analysis of existing data and modelling of forest carbon pools under different land- use and forest-management scenarios.

CIFOR's specific contributions to the broader research community addressing these issues will focus on the feasibility of including forest degradation in an accounting system to address changes in carbon stocks rather than forest cover. In addition, CIFOR will study specific questions relevant to estimating and managing carbon stocks in tropical peat-lands. CIFOR will give particular attention to the appropriate level of participation that local forest agents, actors and beneficiaries should play in measuring and monitoring, and contribute to the development of tools and training for implementation.

2. Identification of policies, governance conditions and payment mechanisms that lead to effective implementation of REDD schemes

Research under this theme will study the design and implementation of national REDD schemes, focusing on the impacts of different models of forest governance and incentive systems on the efficiency and equity of REDD implementation. As a first step, CIFOR will design an analytical framework for learning from the first generation REDD demonstration projects to

explore how benefits to the poor from REDD mechanisms may be enhanced and risks to rights can be minimised.

CIFOR's analysis will focus on distilling lessons from comparative research on REDD, the Clean Development Mechanism (CDM) and other relevant policy instruments. CIFOR's research will give particular attention to the barriers faced by the poor, women and indigenous peoples (e.g. transaction costs, land tenure insecurity) in benefiting from REDD, and ways in which these barriers could be or have been overcome in selected locations (e.g. mechanisms for sharing or minimising transaction costs). CIFOR will develop criteria and indicators of good forest governance for effective and equitable REDD implementation at national and sub-national levels.

3. Political economy and barriers to adoption of policies for efficient, effective and equitable REDD regimes

Research under this theme will examine how diverse political-economic interests around REDD play out in the context of international regime construction, as well as how countries respond to global trends affecting national REDD schemes and their implications for local landscapes and livelihoods. CIFOR's research will illuminate how the interests of different stakeholders (ranging from corporate actors and political élites to indigenous movements) and the perceived legitimacy and capacity of institutions (such as the World Bank and national forestry departments) are likely to shape the design and implementation of REDD regimes at global, national and local levels.

Competing land use and planned deforestation will be of relevance to countries where opportunity costs for land development for industrial crops are high. Research will illuminate the current trade-offs and possible synergies between forests as a source of carbon-neutral bioenergy, co-production of carbon sequestration and other ecosystem services such as biodiversity and water. A major part of the research under this theme will focus on the governance structures and mechanisms that can enable intra- and inter-sectoral decision-making and synergies in the context of REDD regimes.

Geographic focus

Research will be carried out in at least a dozen key countries implementing REDD demonstration activities, selected to cover major tropical forested countries, countries that are 'opinion leaders' in international negotiations, and countries where forest-dependent communities are likely to be most affected. These will certainly include countries in the Amazon Basin, the Congo Basin and Indonesia.

Enhancing the role of forests in adaptation to climate change

Background

Climate change is already having dramatic effects on forests, natural resources and people's livelihoods. In addition to gradual change in precipitation and temperature patterns, the amplitude and frequency of weather-related disturbances, such as hurricanes, droughts and accompanying fires, and pests and diseases, are likely to increase. Particularly exposed ecosystems will be affected first and sometimes irreversibly, while the recovery time of resilient ecosystems may be too slow for forest-dependent species and cultures.

Developing countries often have low adaptive capacity, which is among other factors related to weak institutional and political conditions. Poor people within developing countries are the most vulnerable to climate change, which threatens to undermine their livelihoods. The Earth has already warmed by about 0.7°C over the last 100 years. It is projected that global warming will be between 1.4 and 5.8°C during the next 100 years unless measures are taken to address climate change. When coupled with a global average sea-level rise of over 50 mm during the next 100 years, climate change will adversely impact forests, water resources, human settlements (including coastal cities) and well-being, increasing vulnerability and reducing resilience. For many countries, climate change will undermine economic development and their ability to achieve MDG targets.

A major challenge is to reduce the vulnerability of climate-sensitive sectors, including forestry, energy and water resources, to today's climate variability and then to 'climate-proof' all future development activities. Most countries have already defined adaptation plans or projects but few are considering forests in adaptation. However, forests should be included in adaptation policies for two reasons, first because of their vulnerability and second because of their role in reducing the vulnerability of society to climate change. Many socioeconomic sectors (e.g. hydropower or drinking water) are highly vulnerable to climate change and dependent on forest goods and services. For them, an adaptation option is the conservation and adaptive management of forests providing relevant ecosystem services.

The lack of inter-sectoral approaches for adaptation explains why forests are usually not considered in adaptation policies. Reducing the vulnerability of forests and those elements of society that depend on forests will require both mainstreaming adaptation into forestry (so that forest managers consider climate change threats on forests) and mainstreaming forests into adaptation (so that non-forest sectors dealing with adaptation consider improved forest management as an adaptation measure).

The COP12 of the UNFCCC decided to launch the Adaptation Fund to help the world's poorest nations to implement adaptation measures. Such funding can and should be deployed for forest-related adaptation measures. However, this will require drawing up and implementing 'best practice' guidelines for developing appropriate forest-related strategies in climate-sensitive sectors, and then mainstreaming and integrating forest-related climate concerns into national and sectoral economic planning.

Actions towards adaptation to climate change are urgent and necessary. They need to encompass several levels, including the development of local capacity and supportive national, regional and global policies and investments. The development of adaptation strategies must take into account the relevant hydrologic, economic, social and environmental processes at the global, regional, national, basin and local levels. For developing countries, the emphasis is on designing pro-poor adaptation strategies for the most vulnerable, including rural populations, women and the urban poor, and mainstreaming these adaptation strategies into development policies. This comprises multiple challenges for actors in forestry and other sectors related to land-use planning.

Goal statement

CIFOR's twin goals are to ensure that forestry policy and practice routinely and adequately take into account the need to protect forest-dependent livelihoods from the adverse effects of climate change, and to ensure that national-level adaptation strategies routinely and adequately incorporate improved forest management to address the needs of economic sectors that depend on tropical forest goods and ecosystem services.

Within five years, CIFOR's research will have informed the adoption by the UNFCCC of a set of tested methods for forest-related vulnerability assessment, and criteria and indicators for adaptive management of forests, and will have provided tested and agreed adaptive forest management options to national-level policy processes. CIFOR also aspires to influence forest-related adaptation policies in at least five countries.

Impact pathways

The research under this domain aims at influencing (a) global policy processes and funding for climate change adaptation, (b) national adaptation policies in selected countries, (c) the adaptation policies and practices of civil society, private companies and other stakeholders at the local level. CIFOR's strategy for achieving this influence is focused on developing a framework for assessing the impacts and costs of climate change, developing criteria and indicators for adaptive forest management, and influencing policies to reduce vulnerability of human and forest ecosystems. Research will be carried

out in collaboration with research institutions and other relevant partners, including international (e.g. ICRAF), regional (e.g. CATIE and COMIFAC) and national organisations.

There are two main impact pathways for influencing global policy processes. The first is through comparative studies on the cost-effectiveness of different policy measures and on specific adaptation measures, such as payments for environmental services. The results of these studies will then be fed into the global policy process through the IPCC and the UNFCCC/SBSTA, and/or by influencing individual donor agencies.

The impact pathway to national and local governments, forest managers, logging companies, the scientific community and local stakeholders is through the collaborative development of specific tools, methods and policy reforms in selected countries to support stakeholders to change their management practices. In this respect, CIFOR will seek partnerships with relevant forest communities, forest managers, donors, the scientific community, governmental partners and NGOs to provide critical information on the links between forests and climate change adaptation and on strategies for removing institutional barriers to change.

Research themes

1. *Bringing climate change adaptation into forest management*

Research under this theme will focus on how forest management practices need to change to ensure the continued provision of forest goods and services in the face of climate change (not on how forests *per se* will be affected). It will also contribute to the development of methods for establishing which forest areas are most vulnerable to climate change and variability. In addition, CIFOR will develop tools and methods for assessing the impacts of climate change on forests and the goods and services that they provide, as well as associated adaptive management strategies. Research on this includes topics such as the use of reduced impact logging to maintain ecosystem integrity, fire prevention and management, as well as specific silvicultural options aimed at facilitating genetic adaptation.

In particular, CIFOR will examine how people – especially the poor and women – have been able to respond to the impact of climate variability on forest management options, and seek to draw more broadly applicable lessons for adaptation to climate change. CIFOR's research will give particular attention to the need for processes and policies to safeguard the rights and benefits of those who do not have tenure over forest resources, and will assess the new opportunities and obstacles presented by the trend towards transferring greater control over forests to local communities and authorities.

2. Mainstreaming forestry into climate change adaptation

Research under this theme will contribute to the development of effective tools and methods for identifying the most critical forest ecosystem goods and services to reduce the vulnerability of other sectors (such as agriculture, energy and water) to climate change, and for assessing the vulnerability of those sectors that depend on forest ecosystem services. This includes topics such as hydropower production and the role of forests regulating water flows in watersheds, and the vulnerability of rural communities which depend on firewood and non-timber forest products for their livelihoods.

Subsequently, research will focus on analysing the cost-effectiveness of investments in forestry-sector intervention to reduce the vulnerability of other sectors to climate change. Research will illuminate the importance of reforming land-use planning and governance arrangements (regulatory policies, incentives, decision processes) to harness the potential of forests to reduce vulnerability. CIFOR's research will develop approaches for fostering cross-sectoral planning and decision-making that can address current governance failures, such as the need to empower forest-related stakeholders and organisations to influence national and international decision-making on adaptation.

Geographic focus

Research on mainstreaming forests into climate change adaptation and bringing adaptation into forest management will be undertaken across CIFOR's main geographic regions, including the Amazon Basin, the Congo Basin, South East Asia and the dry forests of sub-Saharan Africa.

Improving livelihoods through smallholder and community forestry

Background

Global attention is focused on poverty, as articulated in the Millennium Development Goals. More than 240 million people live in forested regions, of whom many are poor and depend on forests for income. Forest-based activities in developing countries provide about 30 million jobs in the informal sector, as well as 13–35 per cent of all rural non-farm employment. Hunting and fishing provide over 20 per cent of household protein requirements in 62 developing countries, much of it forest-based. The rapid growth of domestic markets for forest products has created opportunities for low-income households.

Widespread changes in forest governance are occurring that favour strengthened local rights over forest resources and more secure land tenure with positive impacts for access, sustainable resource use and management,

and intensification of production. It is estimated that at least a quarter of the forest estate in developing countries is now under community control, and this is likely to expand.

Due to inadequate data, there is surprisingly little empirically based knowledge to answer basic, yet highly policy-relevant questions related to the forestry-poverty nexus. For example, a recent World Bank meta-analysis of 54 case studies concluded that the underlying data are extremely heterogeneous and methodologically flawed. The picture is unclear as to how forest products may assist poor people accumulate assets, improve their standard of living and move out of poverty. There is inadequate understanding and insufficient well-researched case-study examples of what is required to build viable and sustainable smallholder enterprises. Knowledge is needed that can improve outcomes from smallholder and community approaches and can level the playing field vis-à-vis more powerful actors. Particular needs relate to the way tenure affects forest management and livelihood outcomes, and how smallholder and community producers can better organise to improve livelihood benefits from forests.

Underlying the focus on smallholder and community forestry is the assumption that production and marketing can be efficient and sustainable. However, the literature is replete with examples of how the abundance of forest products has declined as a result of commercialisation. And there are numerous examples of how smallholder production leads to variable quality and quantity of products, thus limiting market penetration, increasing transaction costs and reducing prices. Thus, a key research question is: how can production and harvesting be put on a more sustainable and efficient footing?

Goal statement

The goal of CIFOR's research is to inform a new global understanding of the linkages between forests and human well-being. Within five years, CIFOR's research will have influenced the way smallholder and community forestry concerns are incorporated in poverty-alleviation strategies and forest policy in at least five countries, thereby levelling the playing field for smallholder and community producers.

Impact pathways

At the global level, CIFOR research will influence the way that major stakeholders and opinion leaders think about smallholder and community forestry. Target audiences include the World Bank, the major bilateral donors (via such forums as the Poverty and Environment Partnership – PEP), a few select major international development NGOs that work with natural resources (e.g. CARE), the Collaborative Partnership on Forests (CPF), the United Nations Forum on Forests (UNFF) through its objective on 'forests for people, livelihoods and poverty eradication', and academic audiences, so that

the next generation of forest-livelihood courses is heavily reliant on CIFOR research. Theme one will target certification bodies and international initiatives that address forest management guideline development (e.g. WWF, EU, industry associations, ITTO, IUFRO). The outreach to these global players will include articles in influential academic journals, keynote presentations on CIFOR research at the major forestry congresses, and background papers for the FAO State of the World's Forests Report, PEP and UNFF.

At the country level, CIFOR research and outreach will target producer organisations. This will either be through intermediaries (e.g., government extension staff and NGOs) which work with such organisations, or through the use of appropriate outreach strategies aimed at influencing the policy environment. Policy engagement will be with the key analysts and advisors, both in government and civil society, and with the in-country multi- and bi-lateral actors which have policy influence.

Research themes

1. Practices that facilitate sustainable smallholder and community forestry and secure safety nets from forest biodiversity

Research under this theme will focus on the technical practices that facilitate sustainable smallholder and community-forest management to secure safety nets from forest biodiversity at the stand and larger district or landscape levels. This includes addressing how high-value timber should be managed on smallholdings as well as how timber, non-timber forest products and environmental services can be managed for optimal outcomes. The research will also investigate how trade-offs amongst different forest products and services can be managed (e.g. between fuelwood and honey production; between products favoured by different social groups or genders). Stand- and landscape-level technical methods will be used in this theme.

The theme will document technical management innovations which have been successfully applied in smallholder and community production systems, and where they can be replicated, and how scientific knowledge can complement local ecological knowledge to improve smallholder and community-forest management strategies (including how local knowledge can contribute to certification and other guidelines). Finally, it will recommend the incentives and market and non-market motivations best suited to the use and management of forest biodiversity, and the adoption of improved practices.

2. Institutional arrangements to enhance outcomes from smallholder and community forestry

Research under this theme is expected to answer questions related to the types of organisations, institutional arrangements and business models that are likely to optimise market and non-market benefits for smallholder and community producers, including producer associations, cooperatives and social movements. This will include research into institutional arrangements

that influence market information, negotiating power, partnerships with private companies, gender equity, social cohesion, economies of scale, collective action, elite capture, rights and access, and governance and decision-making mechanisms, to ensure equitable access to and benefits from resources, and that these resources are sustainably managed. Sociological and anthropological methods will be used and, in some cases, may include action research.

Small-scale and community producers face numerous constraints which erode gains in efficiency, increase costs and reduce people's ability to capture a higher price for their products. Research will examine the measures needed to address these constraints and provide real possibilities for small-scale entrepreneurs to move from informal, ad-hoc activities to efficient, productive small-scale forest enterprises and a greater portion of the value chain. The latter will be addressed in terms of value adding, certification, fair trade, greater negotiating power and use of modern technologies such as cell phones and internet. Research methods will be drawn from those relevant to small- and micro-enterprises.

3. Policies and institutions to enhance coordination, productivity, sustainability and profitability

Among the important issues this theme will address is the question of how smallholder and community forestry contribute to rural livelihoods in terms of cultural integrity, social values, gender equality, income, income diversification, safety nets, seasonal gap filling, health, pathways out of poverty and the conditions best suited for enhancing smallholder and community-forestry benefits. The bulk of this work involves micro-economic household surveys by a cohort of PhD students.

CIFOR research will inform the construction of regulatory frameworks to support smallholder and community forestry by generating data on the costs posed by regulatory impediments to smallholder and community commercialisation, and how these can be reduced. It will also propose policies to support better smallholder and community partnerships with private companies. This work will involve policy analysis relevant to the focus products.

Building on past research on forest tenure and decentralisation, new research under this theme will offer insights into how forest tenure, forest-management regimes and decentralisation might improve the outcomes from smallholder and community forestry. An important aspect of policy is the level of support for local practices and traditional knowledge, as well as improving the livelihoods of marginalised groups.

Geographic focus

To ensure this research has global impact, CIFOR will work in multiple countries in both humid and dry forest regions. One to three countries will be included from each of the Amazon Basin, the Congo Basin, South East Asia

and dryland Africa. Selection will prioritise those countries with significant smallholder and community-forestry sectors and where impact is achievable.

Managing trade-offs between conservation and development at landscape scale

Background

Current and future decisions about forest management, utilisation and conservation have major implications for human well-being, equity, biodiversity conservation and the continued flow of ecosystem services (e.g. watershed and pollination services). While conservation efforts continue to develop and optimise the management of protected areas (PAs), most of the world's biodiversity occurs outside PAs, primarily in fragmented landscape mosaics that often represent a range of land-use categories. Integrating sustainable utilisation and conservation in tropical landscapes requires a recognition that there are inherent trade-offs between the two.

There is increasing interest in directly targeting the delivery of forest services through payments for environmental services (PES). These payments are concentrated in four areas: carbon, watershed protection, aesthetic landscape value and biodiversity protection. PES design differs from other approaches by being conditional, quid pro quo initiatives, i.e. 'contractual conservation'. The core idea is to use compensation as a tool to reconcile hard trade-offs between the interests of landowners (as actual or potential service providers) and service users. The hypothesis is that PES can be more cost-effective than other, indirect approaches.

To understand fully the potential of PES, it is necessary to compare its effectiveness with alternative conservation approaches, such as integrated conservation and development projects (ICDPs) or community-based natural resources management (CBNRM).

Access and management rights and responsibilities over land and natural resources have an important influence on the way landscape mosaics are managed. In general, the playing field is not level, often resulting in the marginalisation of local people. A number of important issues require much greater attention by all major conservation and development organisations, and national policy-makers. These include the extent to which resource management authority has been devolved to lower-level jurisdictions, and transparency and accountability in land-related decision-making. In addition, greater attention needs to be given to the principle of prior informed consent, provision of just and proper compensation for land and resource appropriation, and the broader linkages among conservation, human rights and property rights. Debate over such issues must inform the design of institutional

and policy frameworks for finding a balance between conservation and development.

Given the limited success so far in establishing effective strategies for managing landscape mosaics and in implementing ICDPs, there is an urgent need for new approaches. The often polarised debate between advocates of conservation and those advocating more people-friendly approaches suggests the need for sound science to identify better ways of managing the trade-offs between conservation and development objectives.

Goal statement

CIFOR's goal is to shift policy and practice toward conservation and development approaches that are more effective, efficient and equitable in process and outcome. Within seven years, the policies and practices of at least two significant international conservation organisations and donor agencies, and at least five national governments, will begin to reflect the results of CIFOR's research on ecosystem services assessment tools, collaborative decision-making processes over land-use rights, and alternative conservation-tenure models.

Impact pathways

At the global level, CIFOR research will influence the way the major stakeholders and opinion leaders conceptualise, implement and promote more integrated approaches to conservation and development. CIFOR will target a select few of the major international large conservation NGOs that are influential in the field and open to new ideas about conservation implementation, as well as the academic audience (so that the next generation of conservation and development courses is heavily reliant on CIFOR research).

CIFOR will also target select donor organisations, including the World Bank and those major bilateral donors considered important by the large conservation NGOs. To broaden its outreach, CIFOR will access such fora as the PEP and the Poverty Conservation Learning Group (PCLG). Communication materials and activities will include publishing articles in influential academic journals, making keynote presentations at selected meetings and conferences, and holding high-profile events about CIFOR's research during major conservation congresses.

At the country level, CIFOR will engage with national and local government officials in key landscape planning agencies, NGOs and social movements, and national-level policy analysts and advisors from government and civil society.

Research themes

1. Methods for assessing ecosystem services

Research under this theme will focus on developing methods for the assessment and provision of ecosystem services, and on understanding how scientific and local knowledge can be adapted in defining and monitoring ecosystem services. A key area of research is the question of the impact of accessibility – both physical and institutional – on patterns of exploitation, the availability of forest resources and livelihood security. CIFOR will develop methods for reliably and rapidly assessing the linkages between land-use change, spatial patterns and water and pollination services. Research will also examine the role local knowledge plays in defining and monitoring environmental services.

2. Platforms for negotiating conservation and development trade-offs

Research under this theme will provide tools that strengthen the negotiating position of communities and facilitate clearer recognition of the trade-offs between conservation and development. CIFOR research will develop collaborative planning and monitoring tools for identifying and managing trade-offs at the local and landscape levels in ways that are not only transparent, inclusive and accountable, but are also capable of building capacity for meaningful participation, especially by women and other disadvantaged stakeholders. Research will illuminate how governance processes and institutions at local and landscape levels can be reformed to legitimise and better secure the allocation of land-use rights, and to find a better balance between customary norms and formal policy.

3. Institutional frameworks and alternative conservation approaches

Research under this theme will contribute to more informed choices of institutional models to improve livelihoods in different landscape conditions, reduce conflict and enhance forest conservation. CIFOR research will provide a clear analysis of how decentralised decision-making and customary conservation practices can contribute to improved benefits for marginalised people while enhancing forest conservation.

CIFOR research will compare conventional PES with donor- and government-supported interventions, and will identify the conditions that best ensure PES are effective in delivering ecosystem services and improved livelihoods.

Additionally, CIFOR will study the effectiveness of extractive reserves, national parks, protected areas, indigenous reserves and various other institutional models in reducing deforestation and delivering the procedural and tenure rights of smallholders. Equally important will be research that explains how the governance characteristics of different conservation-tenure models can affect their effectiveness and sustainability.

Geographic focus

For this research to have global impact, CIFOR will undertake research in multiple countries in the humid and dry tropics. Countries and landscapes will be selected that illustrate the significant conservation and development concerns found in such mega-diverse regions as the Amazon and the Congo Basin, and in such vital biodiversity hotspots as Indonesia, the Mekong region, Madagascar and Guinea.

Managing impacts of globalised trade and investment on forests and forest communities

Background

Increased trade of forest products and investment in forest-based industries have the potential to stimulate economic growth. Developing countries export more than US\$23 billion worth of timber and processed wood products annually in addition to a range of non-timber forest products. In many countries, the value of internal trade in both timber and non-timber forest products exceeds the value of exports. Yet, in many developing countries, only a small portion of the value generated by forest-related trade and investment benefits smallholder producers and those living in or near forests. Inequitable trade and investment practices, distortions in policies and markets, corruption and governance weaknesses limit, and often undermine, the potential contribution of forest-related trade and investment to livelihood security and sustainable forest use. Moreover, growing market demand for products from forests and related sectors, such as agriculture, mining and biofuels, drives deforestation and forest degradation, resulting in high levels of biodiversity loss and carbon emissions, especially in tropical regions.

Several trends are likely to have significant impacts on forest-dependent peoples and on the world's forests. These include: rapid growth in demand for forest products fuelled by China's accelerated economic growth; a shift in industrial timber production from natural forests in Asia (mainly from Indonesia and Malaysia) to those in Siberia, the Russian Far East and West and Central Africa; and large-scale investments in industrial tree-planting, particularly in tropical regions. The FAO estimates that 50 per cent of the world's industrial wood will be sourced from planted forests by 2020. In addition, high prices for food and biofuel commodities will increase direct and indirect pressures to convert forests to agricultural uses.

The emergence of the World Trade Organization and trade liberalisation initiatives have facilitated the expansion of international trade in forest products and in other products that directly affect forests, such as palm oil, soy beans and beef. Similarly, international financial integration has facilitated large-scale investments, in some developing countries, in wood-based industries,

and in agro-industrial crops, mining and other land-use options that affect forests. The emerging global consensus to limit greenhouse gas emissions and reduce dependency on fossil fuels is also driving dramatic growth in biofuel-related investments.

In recent years, a number of global initiatives have emerged to influence the behaviour of governments (e.g. the Asia-Pacific Group), international financial institutions (e.g. the Equator Principles) and multinational corporations (e.g. the Global Reporting Initiative) so as to mitigate the adverse social and environmental impacts of globalised trade and investment. While such initiatives have addressed forest-specific issues to some degree, there is significant room for further progress.

In order to manage the impacts of globalised trade and investment on forests, governments and other stakeholders need research to construct scenarios that illuminate the implications of current and projected trends for forests and forest-based livelihoods. In addition, research is needed on how to manage these implications at the landscape scale in affected countries.

Goal statement

Within five years, CIFOR's research will have catalysed significant shifts in global investment standards and institutional practice in such areas as risk assessment, monitoring and information disclosure related to the impacts of investment and trade on forests and forest-dependent communities. In at least three countries, CIFOR research will have influenced decision-making processes to manage the impact of globalised trade and investment on forests.

Impact pathways

At the global and regional levels, the main impact pathways will be through key financial institutions, such as the World Bank's International Finance Corporation, and multilateral initiatives, such as the Equator Principles and the Global Reporting Initiative. CIFOR research will support the development of improved tools for risk analysis, due diligence, and social-environmental impact assessments and safeguards. The research is also expected to have global impact by generating knowledge on institutional design options for improving forest outcomes, social equity and rule enforcement, particularly in relation to REDD payments, biofuels and mining development, and other forest-related trade and investment.

At the national level, the main impact pathway will be through credible analytical information and scenarios provided to policy- and decision-makers, to enable them to assess options more realistically and negotiate more favourable bilateral trade and investment agreements, including with China, India and other emerging economies. Through scenario exercises, and

development and testing of improved guidelines for financial due diligence, risk assessment, monitoring and reporting, the research is expected to catalyse better coordinated and more environmentally sound and socially equitable investments in forest and forest-relevant sectors. Outreach will also target the design of more appropriate laws and regulations, particularly those that directly affect forest-dependent communities and households.

At the local level, the main impact pathway will be through producers' associations, federations of community-based groups including indigenous peoples' organisations, and local stakeholder groups engaged with the research in selected locations. Impact is expected to come about through the use and continuing adaptation of research-derived knowledge, analytical techniques, negotiation tools and strategies to enhance local benefits and ensure that investments in their localities are environmentally sustainable, accountable and compliant with laws and regulations, both formal and informal.

Research themes

1. Trade and investment trends

Research within this theme will identify major current and anticipated trade and investment trends that are likely to affect forests and forest-related livelihoods, as well the sources of this investment and the institutions that are involved. Research under this theme will also examine potential policy and market levers that might guide investments towards more sustainable and equitable outcomes.

2. National- and local-level impacts of trade and investment trends

This theme's research activities will contribute towards a significant reduction in the negative social and environmental impacts forests suffer from global and regional trade and investment trends. CIFOR research will generate options for national and local governments and communities to avoid or mitigate these negative impacts. Research will illuminate the distribution of costs and benefits arising from these investments and how local and national governance arrangements and responses shape them. Of particular interest is how the political economy of investment-related decision-making (including the role of corporations in shaping the domestic regulatory environment, and the relative authority of national and local jurisdictions) affects outcomes at the national level.

Geographic focus

CIFOR's work in this domain will expand from its current focus on the Asia-Pacific region to selected countries in other regions, to include countries in the Amazon Basin, the Congo Basin and Africa's dry forests. Criteria for selection will include the significance of forest-related trade and investment issues, interest for global comparative research, and opportunity for impact.

Sustainable management of tropical production forests

Background

Tropical forests are globally significant habitats of biodiversity and comprise about half of the world's forest cover. Hundreds of millions of people live in or at the edge of the tropical forests, including about 60 million indigenous peoples. As production forests (government concessions, municipal forests, private holdings) will constitute up to 80 per cent of the permanent forest estate in many tropical regions, particularly in the Amazon and Congo basins, a large number of forest-dependent people are living in or near production forests and are likely to be affected by the way these forests are (or are not) managed.

Over the last two decades, the global community has been searching for long-term approaches to promote SFM as pressure for tropical forest conversion and degradation has continued unabated. This has resulted in increasing amounts of natural forests being set aside for timber production under proper management. Sustainability remains an elusive goal in many tropical forested countries where the basic tenets of forest management have not really changed over the last few decades. Although the number of 'sustainably' managed tropical forests is currently low, this figure is expected to increase in the near future.

While most existing SFM models are viable for large concessions in unlogged primary forests, this is not the case for the large and rapidly increasing number of small- to medium-scale enterprises working in secondary, fragmented or logged-over forests. In these situations, the current SFM models are often based on unrealistic or non-validated technical prescriptions that hinder SFM's adoption and even undermine its long-term viability. Research is therefore needed to review existing management paradigms for tropical production forests and facilitate the design of new, equitable and more environmentally friendly management rules.

In addition, there is now widespread recognition that local people's values and perceptions of the landscape are important and can improve the ways forests are managed. Local people are also increasingly seen as bringing more holistic values to forest management that may help companies and governments temper their timber-only view with some very important ecological values. The potential for such synergies in production forest management has not been fully realised. Many stakeholders are involved. These include such visible players at the local level as indigenous peoples, migrants, local NGOs, timber companies, agro-industrial developers and local officials. And then there are those who are more distant and less visible, such as international NGOs, national governments, end consumers and companies trading in wood or carbon credits.

Institutional weaknesses in forest-related regulations and their implementation remain major factors underlying the continued unsustainable use of tropical production forests. Contradictory or unclear policies, ineffective or inconsistent law enforcement, corruption and overall weakness in the rule of law prevent countries from realising potential socio-economic, developmental and environmental benefits from forests. The structure of rights, processes for policy decision-making and implementation, and day-to-day practices of key institutions significantly and ultimately affect the way forests are used, and how their benefits are shared. The ‘rules of the game’, systems of incentives and disincentives— those elements at the very essence of governance —need reforms to create conditions necessary for legal, sustainable and equitable forest use, livelihood security and effective poverty alleviation. Without major reforms in policies and practices for a more transparent forest productive sector, efforts to have better managed forests and involve local communities in their management are doomed.

Although many organisations are involved in promoting SFM worldwide, they cover aspects outside CIFOR’s research mandate and geographical focus. CIFOR has a clear niche as a Center that emphasises ‘policy-relevant research’ and a multidisciplinary approach grounded in developing countries with tropical forests.

Goal statement

Within 10 years, CIFOR’s research will help precipitate a paradigm shift related to how production forests are managed and by whom. At the national level in at least five countries, CIFOR research will contribute to a significant increase in the area of production forests managed effectively for goods and services beyond timber, with local people realising a greater share of decision-making and forest income. At the global level, the investment decisions, standards and technical guidelines of key donor agencies (e.g. the World Bank) and forestry agencies (e.g. ITTO) will increasingly reflect this paradigm shift.

Impact pathways

Based on rigorous and sound research, CIFOR and its partners will highlight, propose and advocate new perspectives on the different ways SFM can be implemented in tropical production forests by private enterprises, government and/or local communities to allow a more equitable and sustainable production of goods and services.

The need for this research appears in the programmes and strategic documents of multilateral agreements (e.g. UNFF, CBD, and ITTO), development banks (e.g. World Bank, ADB), multi- and bi-lateral donors (e.g. European Commission, USA, UK, France, Germany). There is also a clear demand for this research from the most advanced part of the commercial timber sector and the community of ‘forest managers’ that is driven by the increasing importance

of certification and the generally bad press linked to logging in tropical forests. A better organised, more transparent commercial timber sector implementing legal, equitable and environmentally sound management practices can only be highly beneficial to concerned countries and local people.

Targeted clients are the international and national policy-makers and practitioners that govern and operate commercial forestry operations. Major direct beneficiaries and end- users of the results and findings of this output are government, enterprises and communities managing forests. Local people will be the ultimate beneficiaries through better managed forests, enhanced institutional management capacities, and greater empowerment in decision-taking processes concerning production forests.

CIFOR will collaborate with key partners: international (e.g. CPF, ITTO, FAO, FLEG) and regional (e.g. COMIFAC, ASEAN, COMESA) organisations and processes, national and local governments, forest industry and NGOs (e.g. FSC, WWF, IUCN) in the development of efficient public policies and market instruments informed by sound tools and information for better managed tropical production forests.

Key international and national policy-makers and donors (e.g. World Bank, European Commission, France, The Netherlands, Germany) will be targeted through direct meetings, pilot projects and policy briefs to illustrate how it can be economically viable to manage production forests to supply forest products, and how forest-based industries can sustainably meet the growing demand for timber and other forest products. International partner organisations and NGOs will also help in disseminating results and promote up-take through their implementation networks so that forest based industries can sustainably meet the growing demand of timber and other forest products.

Research themes

1. Better forest and forest policy regimes

By covering the whole life cycle of public policy governing the management of production forests, this research will assess the effectiveness of public policies and market-based instruments and make recommendations for improving the equity and environmental footprint of commercial timber extraction. This will also include an ex-post assessment of the impacts of policies and instruments on the commercial forestry sector that examines their discourse and how they are conceived, defined and modelled.

Research under this theme will especially address the effectiveness of mechanisms established by Voluntary Partnership Agreements and other 'legality procurement' measures in ensuring that traded forest products originate from legal and sustainable sources. It will also examine the extra-sectoral regulations (e.g. anti-money laundering laws) that can be used effectively to tackle illegal harvesting in production forests. This theme has

its own research agenda, as explained above, but will also build on results and outputs produced in themes 2 and 3 in the design of better forest policies.

2. Tools and information for better managed production forests: beyond Reduced Impact Logging

Better information systems, new silvicultural tools and improved harvesting guidelines are needed for making tropical production forests more valuable for their users and managers across different scales and socio-economic contexts. Research under this theme will include targeted studies to avoid extirpation of commercial timber species at the stand level – moving beyond a ‘minimum felling diameter’ rule – as well as seek ways to reduce the negative impact of timber extraction on non-timber forest products. Research will also look at the integration of biodiversity considerations in production forests and other environmental services, such as carbon sequestration and water regulation. The results will be incorporated into information and monitoring tools developed at national and regional levels to improve the governance and management of tropical production forests and will contribute to theme 1 above.

3. Local people’s values, rights and benefit sharing

CIFOR will conduct research to understand the values, knowledge and perceptions of local people relating to forests. This will help facilitate synergies between stakeholders and help resolve conflicting land-use rights by developing new models for sharing the benefits and the responsibilities associated with production forests. Developing these models will involve working with complex networks of local communities, local governments and forest companies in selected areas. The results of this research will inform and contribute to achievement of themes 1 and 2.

Geographic focus

The research under this domain will focus on selected countries in the wet and humid tropics, including the Amazon Basin, Central America, the Congo Basin, South East Asia and the Pacific. Criteria for selection will include the significance of production forest area, interest for global comparative research, and opportunity for impact.

