

# The International Model Forest Network

A Global Approach to Ecosystem Sustainability



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# Section I Introduction



Peter Besseau Executive Director, International Model Forest Network Secretariat

Twenty years ago it was uncommon to invite local communities, indigenous groups and environmental non-government organizations to meet with industry and government representatives in the hope that all parties might agree on what sustainable forest management means. Even more uncommon was to then ask the parties to collaborate in trying to put sustainable forest management into practice.

Yet, in 1992 at the Rio (UNCED) Summit, this is exactly what Canada did when it set out to see if its "Model Forest" concept - a promising, if unconventional, national initiative – might offer broader benefits. Backed by a \$10 million commitment, the International Model Forest Network (IMFN) was born.

We are now on the eve of the 20th anniversary of that announcement. In the intervening years, membership in the IMFN has grown steadily and a remarkable amount of work has been undertaken throughout the entire Network.

The credit for this work goes to the many committed individuals and groups, often located in remote parts of the world, who are indeed making a difference.

Today the IMFN is a dynamic and results-oriented initiative with a global reach and breadth of activities that address the full spectrum of sustainability challenges in ways that benefit sustainable forest management practitioners and policy-makers alike.

This publication highlights many of the accomplishments of the thousands of people and organizations that are part of the IMFN. National government representatives, business owners, scientists, local

Opposite page

farmers, indigenous people, citizens of resource-dependent communities, individual champions: all have worked – often unacknowledged and with modest resources – to advance sustainable development policy and practices where they work and live.

Today, in 2011, the IMFN includes more than 55 large-scale landscapes in 24 countries, covering more than 100 million hectares with a population of several million people.

Through its regional and global learning networks, the organization has been able to demonstrate practical approaches for addressing many of the most important issues faced by international forest policy today. A key accomplishment, for example, has been validation that local communities are indispensible partners in achieving resource management that is indeed sustainable. Also significant has been the ability of Model Forests to provide a workable approach to ecosystem-based management — management whose partnerships are as complex as the land uses found in those ecosystems. In both of these arenas, Model Forests offer an invaluable way to test the social science component of sustainable natural resource management — that is, helping us understand the human dimension of sustainability, the demands that we place on our ecosystems, the tradeoffs involved in the choices we make in resource use, and the options we have to achieve an acceptable balance.

Over the years, IMFN participants have supported research, training and monitoring related to the issues of particular importance to their Model Forest region. Those issues range from climate change and biodiversity protection to sustainable economic growth, valuation of ecological goods and services, and meaningful stakeholder participation in planning and decision-making. Individual Model Forests around the world, as well as those that are part of regional networks now established in Asia, Ibero-America, Canada, Africa and the Mediterranean region, have been generous in making their knowledge and experience available to one another – a cornerstone objective of the IMFN.

Such peer-to-peer and site-to-site knowledge exchange and shared learning have accelerated innovation across the spectrum of sustainable development issues and have led to the adoption of promising approaches to many common problems.

This publication profiles the history and evolution of the IMFN to its present structure and activities. The IMFN experiences highlighted are only a small sampling of the broad set of programs and activities already delivered or now underway across the Network. The credit for this work goes to the many committed individuals and groups, often located in remote parts of the world, who are indeed making a difference.

Congratulations to all participants in the IMFN!

# Section II About the IMFN

# The Model Forest Concept

In the early 1990s, one of Canada's responses to the challenge of integrating the principles of sustainable development into forestry - a practice now known as sustainable forest management was the creation of the Model Forest Program. The aim of the program was to bring diverse organizations and people together to develop innovative local, landscape-scale approaches to integrating forest management policy, with onthe-ground implementation supported by sound science.

In creating a Model Forest, individuals and groups supporting a wide range of forest values agree to collaborate to devise and demonstrate ways to manage forest-based landscapes and natural resources, using approaches that are both locally acceptable and nationally relevant.

Model Forest participants typically include land users, owners and managers; forest-based and other industries; community, environmental, non-government and forestry groups; federal, provincial and municipal government agencies; academic and research institutions; conservation areas; and indigenous groups and communities. In

this way, each Model Forest represents a diversity of forest values, including social, cultural, economic and environmental concerns important to the participants.

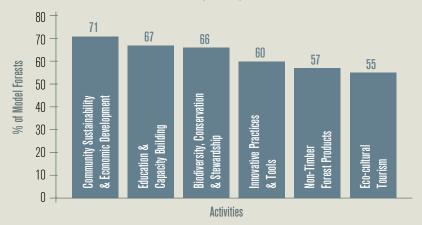
Sharing ideas and knowledge, incorporating multiple values into management, and enhancing local capacities for engaging in sustainable man-

A Model Forest is a large-scale, forest-based landscape that encompasses a variety of land uses and values, resource management administrations, and land ownership.

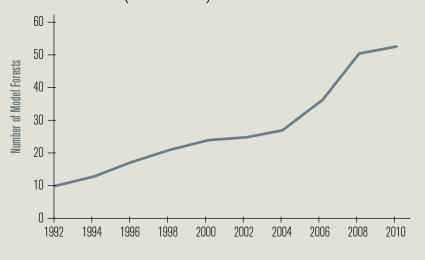
agement practices are all fundamental principles of Model Forests. Through research, tools and approaches to sustainable landscape management are also developed and transferred to practitioners. Governance of a Model Forest is based on consensus, allowing for participants to have a say in the issues to be addressed and activities undertaken. The governance structure is highly flexible and is designed to reflect the cultural, social, political and economic realities of the area within which a Model Forest operates.

Through a Model Forest, participants learn to recognize the potential impacts of their activities on forests and the options that are available for improving their management and use of natural resources. They also develop a shared understanding of sustainable development and of how to put this new knowledge into practice through collaborative activities.

#### Distribution of Most Frequently Occurring Model Forest Activities (2010)



#### IMFN Growth (1992-2010)



## Growth of the IMFN

The United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 saw unprecedented global consensus on the urgent need to find real, practical and sustainable solutions to the serious environmental challenges facing the planet. At the Rio conference, Canada invited other countries to participate in testing Model Forests as a new approach to translating the principles of sustainable development into on-the-ground actions for improving the management of forests and natural resources.

Following the Rio conference, Canada piloted Model Forests in Mexico and Russia and, in 1995, established a Secretariat for the International Model Forest Network (IMFN), headquartered at the International Development Research Centre in Ottawa, Canada. The IMFN Secretariat supports the development of the network, facilitates the exchange of knowledge and expertise, and champions the Model Forest concept to international organizations on behalf of its members.

From an initial 10 Model Forests in Canada in 1992, the IMFN has grown to include more than 55 sites in over 24 countries on five continents, with thousands of partner organizations – and the numbers continue to grow.

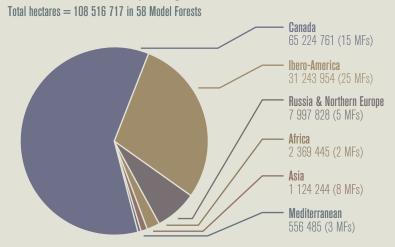
To facilitate the growth and continued development of the IMFN into an effective approach to addressing global forest and natural resource management issues, several national and regional Model Forest networks have also been established:

- The largest regional network, the Ibero-American Model Forest Network, includes 25 sites in Central and South America, as well as one site in Spain.
- The Canadian Model Forest Network includes 15 Model Forests across the country.
- Established in 2008, the Mediterranean Model Forest Network includes nine countries and regions in the Mediterranean basin that are actively pursuing Model Forest development.
- The African Model Forest Network currently includes two Model Forests in Cameroon and proposed initiatives in other Congo Basin countries. Three sites also being developed in North Africa (Algeria, Morocco and Tunisia) are affiliated with the Mediterranean Model Forest Network.
- The Regional Model Forest Network Asia includes Model Forests in China, India, Indonesia, Japan, the Philippines and Thailand.
- A new Russia and Northern Europe Model Forest Network is emerging, with participants exploring opportunities to join Sweden in using the Model Forest approach as a way to enhance sustainable development in the Baltic Sea region.

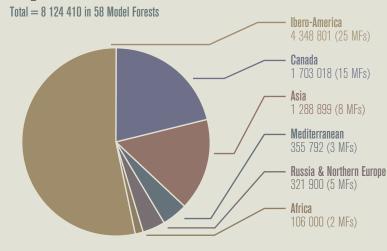
Together, all of the Model Forests and their regional networks make up the IMFN, a global community of practice whose flexible shared framework facilitates the exchange of lessons learned across the regions and with other organizations.

For nearly 20 years now, forest-dependent stakeholders around the world have been voluntarily translating sustainable natural resource management priorities and policies into action on the ground through the Model Forest approach.

#### **Total Hectares of** Model Forests by Region



#### Regional Distribution of **Population in Model Forests**



Note: Urbión Model Forest is included as part of the Mediterranean Model Forest Network, but it is also a member of the Ibero-American Model Forest Network.

### **Milestones**

| 1992 | Canada launches national Model Forest Program  |
|------|--|
|      | Canada invites international participation in Model Forests at the United Nations<br>Conference on Environment and Development, Rio de Janerio, Brazil |
| 1994 | First Model Forests established outside Canada (Mexico and Russia)   |
| 1995 | International Model Forest Network Secretariat established at the International Development Research Centre, Ottawa, Canada                            |
| 1996 | IMFN Global Forum, Chihuahua, Mexico   |
| 1998 | First Model Forests established in South America (Argentina and Chile)   |
| 1999 | First Model Forest established in Asia (China)<br>IMFN Global Forum, Halifax, Canada   |
| 2001 | IMFN and CUSO (now CUSO-VSO) sign an agreement to collaborate to place volunteer cooperants in Model Forests   |
| 2002 | Regional Model Forest Network for Latin America and the Caribbean established  |
| 2004 | First Model Forest established in Europe (Sweden)  |
| 2005 | IMFN Global Forum, Turrialba, Costa Rica   |
|      | First Model Forests established in Africa (Cameroon)   |
| 2008 | IMFN Global Forum, Hinton, Canada<br>Mediterranean Model Forest Network established  |
| 2009 | African Model Forest Network and Secretariat established   |
|      | Secretariat of the Regional Model Forest Network - Asia established  |
| 2011 | IMFN Global Forum, Burgos, Spain   |
|      | International Symposium on Ecosystem and Landscape-level Approaches to Sustainability, Burgos, Spain   |
|      |  |

#### International Model Forest Network

The IMFN was established with the vision of supporting, through Model Forests, the management of the world's forest resources in a sustainable manner, reflecting environmental and socioeconomic issues from the perspective of local needs and global concerns.

The primary goal of the IMFN is to establish a global network of Model Forests that will represent most of the major forest ecosystems of the world. The Network strives to ensure that all partners, regardless of political or economic status, can contribute to, and share in, the benefits of the Network as they work toward the sustainable management of forest-based landscapes.

#### Three key objectives of the IMFN are:

- To foster international cooperation and exchange of ideas relating to the working concept of the sustainable management of forest-based landscapes and natural resources
- To support international cooperation in critical aspects of forest science and social science that underlie the search for new models of forest and landscape management
- To support ongoing international discussions on the criteria and principles of sustainable development

As a long-term goal, the Network will serve as a foundation for international cooperation on the sustainable development of forest-based land-scapes and natural resources. Participating Model Forests will share their knowledge and encourage broad implementation of management and conservation methods that ensure that forests continue to provide benefits for humanity.

# The IMFN and International Forest Policy Priorities

The Model Forest approach is highly focused on "doing" — that is, on taking sustainable forest management policy priorities and finding ways to put them into practice, in real landscapes, in real time, and for real benefits. Therefore, local, national and international agreed-upon sustainable forest management policy provides a framework for Model Forest activities, thereby actualizing the adage "from global to local."

The IMFN is not prescriptive in terms of the program of activity that individual sites commit to; all Model Forest projects are at the discretion of the individual Model Forest partnerships. However, in applying to become a member of the IMFN, members agree to support the goals and objectives of the Network and, in particular, to make an active link between their programs and national forestry policy. As national governments are typically members of the Model Forest partnership group, this tends to encourage this "policy/practice" relationship.

As shown in the table (right) there are significant and extensive links between the activities of Model Forests and several of the most important policy vehicles supporting SFM internationally.

IMFN Strategic Initiatives (see page 14) provide added opportunities for the Network to respond to national and international policy priorities.

#### **Main Areas of Impact** Governance, participatory processes and conflict Millennium **Development Goals** Sustainable economic Convention on development Biological Diversity Integrating protected area National Forest values into larger landscapes Programs **Education** and United Nations Forum capacity building on Forests: Global Applied science Objectives on Forests and research United Nations Networking and learning Framework Convention on Climate Change Testing and demonstrating United Nations Convention to Combat Policy impacts Desertification Resource mobilization

### **International Model Forest Network**



| COU  | NTRY / MODEL FOREST                      | ESTABLISHED |
|------|--|-------------|
| Argo | entina                                   |             |
| 36   | Formoseño                                | 2000        |
| 40   | Futaleufú                                | 1998        |
| 37   | Jujuy                                    | 2002        |
| 39   | Norte de Neuquén                         | 2005        |
| 35   | San Pedro                                | 2007        |
| 38   | Tucumán                                  | 2008        |
| Boli | via                                      |             |
| 28   | Chiquitano                               | 2005        |
| Braz | zil                                      |             |
| 30   | Mata Atlántica                           | 2004        |
| 29   | Pandeiros                                | 2005        |
| Can  | neroon                                   |             |
| 49   | Campo Ma'an                              | 2005        |
| 50   | Dja et Mpomo                             | 2005        |
| Can  | ada                                      |             |
| 5    | Clayoquot Forest<br>Communities          | 2008        |
| 9    | Cree Research and<br>Development Institu | ıte 1997    |
| 15   | Eastern Ontario                          | 1992        |
| 4    | Foothills Research<br>Institute          | 1992        |
| 14   | Fundy                                    | 1992        |
| 11   | Lac-Saint-Jean                           | 2007        |
| 7    | Lake Abitibi                             | 1992        |

| COU  | NTRY / MODEL FOREST                    | ESTABLISHED |
|------|--|-------------|
| 10   | Le Bourdon Project                     | 2007        |
| 6    | Manitoba                               | 1992        |
| 12   | Newfoundland<br>and Labrador           | 1992        |
| 8    | Northeast Superior<br>Forest Community | 2007        |
| 13   | Nova Forest Alliance                   | 1998        |
| 1    | Prince Albert                          | 1992        |
| 3    | Resources North<br>Association         | 1992        |
| 2    | Weberville Community                   | y 2010      |
| Chil | e                                      |             |
| 32   | Araucarias del<br>Alto Malleco         | 2002        |
| 31   | Cachapoal                              | 2005        |
| 34   | Chiloé                                 | 1998        |
| 33   | Panguipulli                            | 2005        |
| Chir | 18                                     |             |
| 53   | Lin'an                                 | 1999        |
| 52   | Tahe                                   |             |
| Colo | ombia                                  |             |
| 27   | Risaralda                              | 2008        |
| Cos  | ta Rica                                |             |
| 25   | Chorotega                              | 2011        |
| 26   | Reventazón                             | 2003        |
| Cub  | a                                      |             |
| 16   | Sabanas de Manacas                     | 2008        |
|      |  |             |

| COU     | NTRY / MODEL FOREST | FSTABLISHE |
|---------|---------------------|------------|
| Don     | ninican Republic    |            |
|         | Colinas Bajas       | 2010       |
|         | Sabana Yegua        | 2003       |
|         | Yaque del Norte     | 2007       |
|         | temala              |            |
| 21      | Lachuá              | 2008       |
| 22      | Los Altos           | 2008       |
| Hon     | duras               |            |
| 23      | Atlántida           | 2006       |
| $^{24}$ | Yoro                | 2007       |
| Indi    | a                   |            |
| 54      | Kodagu              | 2005       |
| Indo    | nesia               |            |
| 58      | Margowitan          | 2004       |
| Jap     | an                  |            |
| 51      | Kyoto               | 2011       |
| Mor     | OCCO                |            |
| 47      | Ifrane              |            |
| Phil    | ippines             |            |
| 57      | Carood Watershed    | 2010       |
| 56      | Ulot Watershed      | 2000       |
| Pue     | rto Rico            |            |
| 00      | Tierras Adjuntas    | 2007       |

|      | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,                   |         |
|------|---|---------|
|      |   |         |
| 41   | Komi  | 200     |
|      | Kovdozersky   | 200     |
| 42   | Pskov   | 200     |
| Spai | n   |         |
| 46   | Urbión  | 200     |
| Swe  | den   |         |
| 45   | Bergslagen  |         |
| 44   | Vilhelmina  | 200     |
| Thai | land  |         |
| 55   | Ngao  | 200     |
| Turk | ey  |         |
| 48   | Yalova  |         |
| 004  | ntries in which a Model<br>early stages of develo<br>eria | . 0.001 |
| _    | atia  |         |
|      | nocratic Republic<br>he Congo                             |         |
| Fra  | nce   |         |
| Gre  |   |         |
| Ital |   |         |
|      | aguay   |         |

Peru Tunisia

### Structure of the IMFN

At the centre of the IMFN are the Model Forests themselves. Model Forests acknowledge that the social side of sustainability - building relationships that allow for a broad range of stakeholders to work together over a long period of time – is just as important as other aspects of sustainability. For this reason, Model Forests create governance structures that are inclusive, participatory, open and accountable to their stakeholders and the rest of the IMFN.

While the IMFN Secretariat facilitates the dayto-day administration of the overall network, regional Model Forest networks and secretariats were created to allow for a greater focus on Model Forest development and networking opportunities from regional vantage points. An International Advisory Council and the IMFN Networking Committee were also created to provide strategic and operational advice to the IMFN and IMFN Secretariat.

#### **IMFN** Secretariat

The IMFN Secretariat was established in 1995. The Secretariat has a small staff that provides the central day-to-day coordination of support and development services to the Network, and works to strengthen and expand the Network. The Secretariat also supports:

- Maintenance of the principles and attributes of Model Forests
- Partnership development and capacity building
- Technical and logistical issues in establishing and operating Model Forests
- International communications, networking and knowledge management

- Network-level initiatives on key globally relevant themes, such as ecological goods and services, climate change and community sustainability
- Resource expansion and international advocacy

For 12 years the IMFN Secretariat was housed within the International Development Research Centre in Ottawa. In 2007, it moved to the Canadian Forest Service within Natural Resources Canada.

#### **Regional Model Forest Networks**

Regional networks were created to more effectively define, articulate and manage a program of work reflecting the priorities, strengths and opportunities unique to a particular region. Regional functions include:

- Networking between Model Forests within a region (transfer of knowledge and experience)
- Assistance in regional resource expansion
- Regional communications, advocacy and knowledge management
- Regional program support
- Regional partnership development and capacity building
- Review and approval of new Model Forests and membership in a regional network

Governance structures for regional networks vary from region to region. For example, the Ibero-American Model Forest Network has a management team based in Turrialba, Costa Rica, and a board of directors that meets twice a year. Small Secretariats have also been established for Africa (Yaoundé, Cameroon), Asia (Beijing, China) and the Mediterranean (Valladolid, Spain).

In some regions, such as Canada and Russia, the national network effectively operates as a regional network. In 2006, the Canadian Model Forest Network became an independent, non-government organization with a management team based in Kemptville, Ontario. The Argentine Model Forest Network is supported by a Secretariat housed within a national government agency, while the Komi Model Forest acts as the coordinator for the Russian Model Forest Network.

#### **IMFN International Advisory Council**

The IMFN International Advisory Council (IAC) was established in 2007. Among its functions, the IAC provides strategic advice to the IMFN Secretariat concerning its growth, focus, deliverables and opportunities for fulfilling its mandate and meeting the needs of its members. The IAC also assists the Secretariat in engaging and collaborating with other international organizations and initiatives with similar goals and thereby in actively contributing to international forest policy issues. The council consists of several senior experts with broad international experience and perspectives.

#### **IMFN Networking Committee**

The IMFN Networking Committee assists the IMFN Secretariat in identifying trends, issues and opportunities of global or regional importance, and in facilitating information, expertise and experience flow between regions. The creation of the committee was a direct response to outcomes from the 2005 IMFN Global Forum in Costa Rica, where participants requested the formation of a Network-level body that would address issues common to all Model Forests. Each Regional Model Forest Network and IMFN operating region has a representative on the committee.

This group represents an important opportunity both for Network members to have greater voice in the evolution of this global community of practice, and for new ideas to be brought forward and realized.

#### Principles and Attributes of Model **Forests**

Model Forests around the world are as unique and diverse as the countries and cultures they belong to. While each Model Forest sets its own programming priorities and governance structure, on a global scale Model Forests are linked through a common philosophy. All Model Forests share a core set of six principles that give the IMFN coherence and provide the basis for networking and knowledge sharing:

- 1. Broad-based partnership: each Model Forest is a neutral forum that welcomes voluntary participation of representatives of stakeholder interests and values on the landscape
- **2. Large landscape:** each Model Forest is a large biophysical area representing a broad range of forest values, including social, cultural, economic and environmental concerns
- 3. Commitment to sustainability: stakeholders are committed to the conservation and sustainable management of natural resources and the forested landscape
- **4. Good governance:** the Model Forest management process is representative, participatory, transparent and accountable, and promotes collaborative work among stakeholders
- **5. Broad program of activities:** activities undertaken by a Model Forest reflect the Model Forests' vision and stakeholder needs, values and management challenges
- Commitment to knowledge sharing, capacity building and **networking:** a Model Forest builds stakeholder capacity to engage in the sustainable management of natural resources, collaborate, and share results and lessons learned through networking



# Partnership and Collaboration

Since 1995, the IMFN Secretariat has worked with numerous international organizations to support the sustainable management of forests and landscapes. These organizations include:

- Food and Agriculture Organization of the United Nations (FAO)
- Genter for International Forest Research (CIFOR)
- International Union for Conservation of Nature (IUCN)
- Secretariat of the Convention on Biological Diversity (CBD)
- UNESCO Man and the Biosphere Program (MAB)
- The Center for People and Resources (RECOFTC)
- Tropical Agricultural Research and Higher Education Center
- CUSO-VSO, a Canadian volunteer-sending development organization

#### CUSO-VSO and the IMFN: A Mutually Beneficial Collaboration

CUSO-VSO is one of North America's leading volunteer-based international development organizations. It seeks people of all ages who have in-depth knowledge and experience in a range of fields, and places them with organizations around the world seeking to overcome poverty.

Since 2002, more than 50 volunteers have been placed in Model Forests throughout Latin America. One of these was Canadian Linda Vaillancourt. An expert in integrated rural development, Linda went to Costa Rica in 2007 to advise the Protected Area Management Program in the Reventazón Model Forest. The program's goal was to strengthen three protected areas by supporting the development and implementation of tailored management plans through broad participation. Over her two-year assignment, Linda worked to transfer her knowledge to Model Forest stakeholders so they could work to balance conservation values with cultural and economic needs.

Today, all three management plans are operational. Not only that, but the communities and local organizations involved in the process now have the skills necessary to understand and participate in the sustainable development of their areas at a landscape scale.

Based on the success of volunteer placements like this one across Latin America, collaboration between CUSO-VSO and the IMFN was extended in 2010 to Cameroon and the Philippines.

> Left: CUSO cooperant talking with Chiquitano Model Forest member in Alta Vista, Bolivia

Right: CUSO cooperant talking with KEDLAP workshop participants in Alta Vista, Bolivia



Mountainous cloud forest, Jujuy Model Forest, Argentina

# IMFN Global Forum

Every three years, Model Forest representatives from around the world gather at the IMFN Global Forum to share experiences and knowledge, review their accomplishments and identify strategic directions for the Network for the years ahead. The 1996 and 1999 events – in, respectively, Chihuahua, Mexico, and Halifax, Canada - were small because few Model Forests had been established in the IMFN, particularly outside Canada.

By the 2005 IMFN Global Forum in Turrialba, Costa Rica, 37 Model Forests were active or in development in 16 countries on five continents, with an aggregate land base of nearly 50 million hectares and more than 1 000 partner organizations.

By 2008, the year of the IMFN Global Forum in Hinton, Canada, more than 50 Model Forests existed in 21 countries.

#### 2005 Global Forum, Turrialba, Costa Rica

The 2005 IMFN Global Forum marked the 10th anniversary of the IMFN Secretariat. More than 130 Model Forest representatives and partners from around the world met in Turrialba, Costa Rica, to review the accomplishments and development of the IMFN over the last decade and to consider where it should go from there. Highlights of the 2005 Global Forum included:

- Three working group sessions, focusing on networks and networking at local/regional, national and international levels
- A request by representatives for the development of a formal statement of the common philosophy that links Model Forests around the world - a statement that became the Model Forests **Principles and Attributes Framework**
- A meeting of boreal forest countries to discuss options for developing IMFN-level thematic programming across the boreal region, leading to the development of the IMFN Circumboreal Initiative

#### 2008 IMFN Global Forum, Hinton, Canada

More than 150 delegates, representing national governments, IMFN partner organizations and Model Forest stakeholders, came together at the 2008 IMFN Global Forum. Highlights of the 2008 Global Forum included:

- Formal adoption of the Model Forest Principles and Attributes
   Framework
- Identification of four strategic priorities for the IMFN: climate change, community sustainability, ecosystem services and knowledge management
- Formalization of the International Advisory Committee and the IMFN Networking Committee
- Identification of short-, medium- and long-term goals for a knowledge management approach for the IMFN
- A series of capacity-building workshops on a wide range of topics, including Model Forest development, strategic planning, eco-tourism, resource mobilization and carbon budget modeling

#### 2011 IMFN Global Forum, Burgos, Spain

During the 2011 Global Forum, IMFN members will gather to share knowledge, to discuss the successes and challenges of the past three years, and to plan for the next three years. Discussions will include progress on IMFN Strategic Initiatives and an IMFN Charter, both of which will establish guidelines to facilitate the ongoing expansion of the Network.

Preceding the Global Forum, more than 300 experts from around the world will participate in the International Symposium on Ecosystem and Landscape-level Approaches to Sustainability. During the symposium, the IMFN and the Spanish Regional Government of Castile and León will facilitate the exchange of knowledge and ideas on the inventorying and monitoring of landscapes, ecosystem goods and services, governance, and future directions and opportunities.

2008 IMFN Global Forum in Hinton, Canada





Reventazón River, Reventazón Model Forest, Costa Rica

# **IMFN Strategic Initiatives**

Model Forests provide platforms for putting local research and actions into practice. At the broader level, the Model Forest Network serves as a conduit for disseminating ideas and expertise gained from this research and for building partnerships with other like-minded organizations. These attributes make the IMFN an efficient, cost-effective spring-board from which to tackle global, regional and local challenges, as well as to foster innovation in these and other priority areas.

At the 2008 IMFN Global Forum, participants identified several programming priorities of relevance to all network members in all regions and countries. Strategic Initiatives were established to

The IMFN is developing models for knowledge sharing that would work at local, regional and global levels and that could be replicated by others, thereby increasing the potential for scaling up impacts.

enable members to develop and implement programming priorities that address thematic issues that extend beyond one Model Forest. The goal of each initiative is to use Model Forests as a platform for examining the links between international policy objectives and on-the-ground actions.

The IMFN Circumboreal Initiative focuses on developing international cooperation on key common boreal issues using Model Forests and other landscape areas in all boreal countries. Through this initiative, links between countries are being explored that will allow many important questions to be examined collaboratively, including those related to conserving biodiversity, helping forest-dependent communities adapt to rapidly changing climate, and managing forest land use sustainably.

Climate change is one of today's greatest international challenges and one that has farreaching implications for sustainable livelihoods, water and food security, health, and biodiversity. Model Forests, with their landscape-scale platforms and broad stakeholder engagement, are ideally suited sites in which to carry out climate change studies, develop and test community adaptation strategies, and monitor such efforts over the long term. The IMFN Climate Change Strategic Initiative focuses on enhancing Model Forest capacity to engage in "Reducing Emissions from Deforestation and Forest Degradation" (REDD+) activities, as well as to examine vulnerability and adaptation in terms of issues of shared importance, such as the effects of climate change on biodiversity and sustainable livelihoods. Successful strategies and lessons learned will be shared across the Network.

Because people and the forest-based communities they live in are central to the Model Forest concept, community sustainability is highly relevant to the IMFN. Through the IMFN Community Sustainability Strategic Initiative, Model Forests focus both on assessing the practices and actions needed at the local level to promote sustainability, and on looking at global challenges related to poverty alleviation, sustainable economic development and food security. Activities under this initiative are expected to affect communities in positive, tangible ways while fulfilling the goals and objectives of international priorities such as the United Nations' Millennium Development Goals.

The IMFN Ecological Goods and Services Strategic Initiative focuses on ensuring the provision of goods and services essential to meet basic human needs through integration of management and conservation of natural resources into the market economy. Model Forests serve as opportunities to demonstrate approaches to developing and promoting the value of ecological goods and services.

#### Prince Albert Model Forest, Canada, and Vilhelmina Model Forest, Sweden, Collaborate Through the IMFN Circumboreal **Initiative**

Within the boreal region, indigenous peoples consider reindeer (Rangifer tarandus tarandus) and woodland caribou (R. tarandus caribou) to be cultural keystone species. The Model Forests in Prince Albert, Canada, and Vilhelmina, Sweden, are participating in a joint study to link species distributions of reindeer and caribou, based on indigenous observations of changing climate and habitat conditions, to herders' and hunters' adaptive strategies. Supported by the IMFN Circumboreal Initiative, the knowledge gained will enhance understanding of how changes across different parts of the circumboreal region impact northern indigenous livelihoods.

Caribou hunters in Saskatchewan and reindeer herders in Sweden are being interviewed through the Model Forest Program to document their experiences of how climate changes are affecting caribou and reindeer habitat and distribution.

The focus will be on how knowledge is gained rather than what knowledge is gained. The information will be used to develop a teaching module that can be linked to resource management courses taught at northern and boreal region-based universities and colleges.

#### The IMFN E-commerce Pilot Project

Nine Model Forests in the Ibero-American region are involved in an e-directory pilot project designed to facilitate the electronic buying and selling of goods and services offered by small- and medium-sized enterprises within Model Forests. The e-directory will be an important reference guide for potential buyers and a marketing tool for enterprises based in Model Forests. A CUSO-VSO volunteer cooperant has joined the Ibero-American Model Forest Network management team for a two-year period as Advisor in Marketing and Trade to assist in implementing and supporting the development of this pilot project.



#### Regional Model Forest Network - Asia Pilot Project: Valuation of Ecological Goods and Services in the Kodagu Model Forest

The 800-kilometre Cauvery River in Karnataka, India, is the area's predominant river. It provides water for the cities of Bangalore and Mysore and for a large rural population. Over the past 10 years, average annual inflow into the watershed has dropped significantly, a situation made worse by shifting rainfall patterns and loss of forest cover in the catchment area.

Shade-grown coffee accounts for a large portion of the economic base of the region and coffee planters are seeking increased timber harvesting rights to supplement declining income. With funding from the IMFN Strategic Initiatives, the Kodagu Model Forest is supporting a comprehensive assessment of the full value of the ecological goods and services afforded by the watershed. Through this assessment, stakeholders are planning to approach local governments about adopting a system of Payment for Environmental Services for coffee growers in the area. The payments would encourage growers to play an active role in ensuring that the ecological goods and services of the river basin are managed for the long term.

#### Knowledge for Effective Learning and Development (KEDLAP)

The KEDLAP project was launched in 2008 to assess how collaborative learning and sharing of knowledge can help resource based development organizations achieve better results. Funded by the International Development Research Centre, the project is also being supported by CUSO-VSO, the Ibero-American Model Forest Network and the IMFN Secretariat.

KEDLAP participants create and share knowledge in different forms through, for example, collecting and sharing thematic information, systematizing best practices, leading policy analysis, developing practical methodologies and tools, participating in online courses and seminars, sponsoring coaching and mentoring, and conducting face-to-face exchanges and workshops. Lessons learned from the project are being transferred to other IMFN regions.

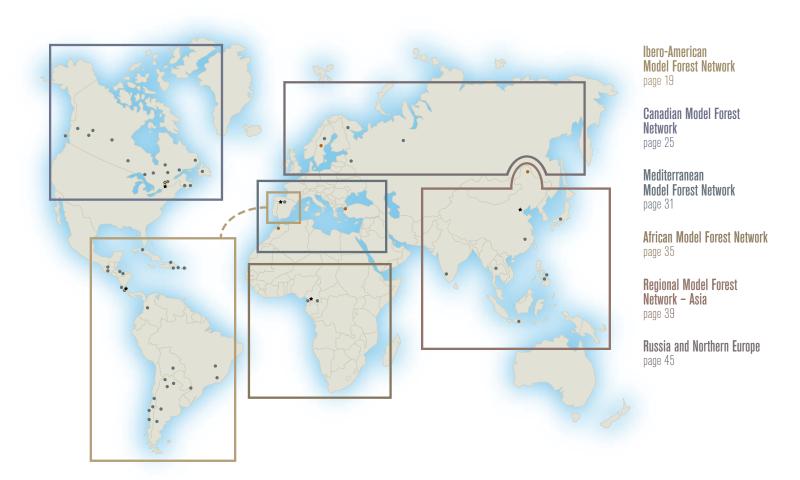
> Left: Fencing between elephant and coffee plants, Kodagu Model Forest. India

Right: **KEDLAP workshop participants in Alta Vista, Bolivia** 

The topic has garnered strong interest across the IMFN and a discussion paper has been written, entitled "Maintaining Ecological Goods and Services: Overview of the Issues and Options" (Kennedy et al., 2009, Pembina Institute). In addition to regional pilot projects underway, there are many examples of activities at the site level.

A fundamental principle of Model Forests is to share experience and lessons learned. The IMFN Knowledge Management and Sharing approach supports the use of information and communications technology and knowledge management techniques to improve the effectiveness of Model Forests in the sustainable management of forestbased landscapes. The IMFN is developing models for knowledge sharing that would work at local, regional and global levels and that could be replicated by others, thereby increasing the potential for scaling up impacts and reliability.

# Section III Regional Networks



- ★ Regional Model Forest Secretariat
  ★ IMFN Secretariat





## The Ibero-American Model Forest Network

#### Development of a Regional Model Forest Network in Ibero-America

The first Model Forest in Latin America was established in Chile in 1998. That same year, Argentina committed to developing one Model Forest in each of its five forest regions. Growing interest in Model Forest development in the region led, in 2002, to the Latin America and Caribbean Model Forest Network (LAC-Net) being established. The Secretariat for the new regional network was based in the United Nations Development Programme offices in Chile.



Risaralda Model Forest. Colombia

In 2004, Brazil and Costa Rica joined LAC-Net and the organization's headquarters moved from Chile to the Tropical Agricultural Research and Higher Education Center (CATIE) in Costa Rica. When Spain joined in 2007, the network changed its name to the Ibero-American Model

#### Since 2008, the Analog Forestry Project has established pilot biodiversity restoration sites and offered practical training for landowners.

Forest Network (IAMFN). Today the IAMFN is the largest regional network in the International Model Forest Network (IMFN), with 25 Model Forests established in 12 countries across Central America, South America and the Caribbean and in Spain.

The IAMFN is governed by a Board of Directors made up of one national-level representative from each member country, one Model Forest representative per country, and one representative from each of the IMFN Secretariat, CATIE, CUSO-VSO and the United Nations Food and Agriculture Organization.

#### **Model Forest Activities and Regional Priorities**

The vision of the Model Forests of the IAMFN is to be a regional benchmark for the sustainable management of natural resources on a landscape scale, supported with widespread social participation. The IAMFN contributes to public policies on the sustainable management of natural resources by promoting cooperation among Model Forests, institutions and countries in the region through knowledge exchange and innovative practices. The IAMFN members are collectively working toward this by:

- Consolidating existing Model Forests and the growth of the network while connecting with one another
- Strengthening the capacity of the IAMFN to provide support to its members, including helping them achieve financial sustainability
- Disseminating and transferring technical knowledge across the network through the sharing of best practices and activities
- Contributing to processes that encourage the formulation, implementation and evaluation of public policies related to sustainable development

#### **Regional Projects**

In addition to supporting Model Forest development, the IAMFN Management Team at CATIE facilitates Model Forest cooperation with other organizations and engagement in regional-level activities. Two key regional-level activities implemented in collaboration with partner organizations include the Analog Forestry Project and the Ibero-American Landscape Management Network.

Since 2008, the **Analog Forestry Project** has established pilot biodiversity restoration sites and offered practical training for landowners in three Model Forests: Atlántida (Honduras), Reventazón (Costa Rica) and the Colinas Bajas (Dominican Republic).

Analog forestry methodology and organic production practices were taught. As well, demonstration sites and tree nurseries were established, with a large variety of trees, shrubs and plants cultivated in them. This project created the capacity for local communities not only to restore degraded land but also to diversify their cultivation practices. This resulted in new forms of income generation, as well as an increase in organic production practices.

The experience and development tools gained through the project will be shared with other Model Forests in the region, as well as other organizations with similar biodiversity restoration and poverty reduction goals. It will also serve as the foundation for extending biodiversity restoration projects based on analog forestry throughout Ibero-America. With funding from CIDA, the project is coordinated by the IAMFN, CATIE and the Falls Brook Centre (a Canadian centre for rural development and training).

The Ibero-American Landscape Management Network (RIMAP) is a network linking research groups that are partners of Model Forests in eight countries (Argentina, Bolivia, Colombia, Costa Rica, Dominican Republic, Honduras, Puerto

**Analog forestry** is "a system which seeks to establish analog ecosystems with architectural structures and ecological functions similar to the original climax or sub climax vegetation. It also seeks to strengthen rural communities, socially as much as economically, through the use of species that provide commercial products."

Source: International Analog Forestry Network (http://www.analogforestrynetwork.org/)

Rico and Spain). The goal of the project is to promote and coordinate the management and restoration of degraded forest-based landscapes in the Model Forests. This Community of Practice also focuses on sharing knowledge by organizing or supporting the organization of regional workshops and meetings and the production of publications distributed through the Ibero-American Model Forest Network. RIMAP is funded by the Ibero-American Science and Technology Development Program.

Analog forestry planting project in Reventazón Model Forest, Costa Rica





#### **Milestones**

| Milliotolloo |   |  |
|--------------|---|--|
| 1998         | Chiloé Model Forest established in Chile, the first Model Forest in Latin America<br>Futaleufú Model Forest established in Argentina  |  |
| 2000         | Formoseño Model Forest established in Argentina   |  |
| 2001         | CUSO-VSO cooperants first placed in Model Forests in the region   |  |
| 2002         | Jujuy Model Forest established in Argentina<br>Araucarias del Alto Malleco Model Forest established in Chile<br>Latin America and Caribbean Model Forest Network (LAC-Net) established  |  |
| 2003         | Sabana Yegua Model Forest established in the Dominican Republic<br>Reventazón Model Forest established in Costa Rica  |  |
| 2004         | LAC-Net headquarters moved from Chile to Costa Rica<br>Mata Atlántica Model Forest established in Brazil  |  |
| 2005         | Five Model Forests join the network: Norte de Neuquén (Argentina), Chiquitano (Bolivia), Pandeiros (Brazil), and Panguipulli and Cachapoal (Chile)  |  |
| 2006         | Altlántida Model Forest established in Honduras<br>Urbión Model Forest established in Spain   |  |
| 2007         | LAC-Net changes name to the Ibero-American Model Forest Network (IAMFN) when Spain joins the network  Four Model Forests join the network: Yaque del Norte (Dominican Republic), Yoro (Honduras), Las Tierras Adjuntas (Puerto Rico), and San Pedro (Argentina) |  |
| 2008         | First IAMFN Congress, Soria, Spain<br>Five Model Forests join the network: Risaralda (Colombia), Tucumán (Argentina),   |  |

Lachuá and Los Altos (Guatemala), and Sabanas de Manacas (Cuba)

Colinas Bajas Model Forest established in the Dominican Republic

Chorotega becomes candidate Model Forest in Costa Rica

#### **Looking Forward**

In 2009, the IAMFN Board of Directors identified the following set of priorities for the IAMFN:

- Land use planning and sustainable development Model
   Forests will facilitate enhanced stakeholder engagement in
   the development and implementation of land use plans.
- **Social responsibility** Model Forests will assist in enhancing stakeholder capacity related to corporate social responsibility and increase cooperation with the private sector.
- Research program A proposed IAMFN Research Fund will help identify opportunities for collaboration and strengthen cooperation between Model Forests and local universities.
- Micro-credit, micro-entrepreneurship and competitive funds –
  These approaches, which build on the successful experiences
  of several Model Forests in the IAMFN, will be encouraged
  in other Model Forests to promote personal and collective
  development initiatives.
- Local leadership for sustainable development A school of leaders within the IAMFN will systematically train young people with the goal of enhancing collaborative leadership capacity across the regional network.

Top left: Forestry education in Urbión Model Forest, Spain

Top right: Araucarias del Alto Malleco Model Forest, Chile

2010

#### Argentina's Jujuy Model Forest: Building Credibility and Trust

The Jujuy Model Forest is located in the northwestern part of Argentina. Within it are mountainous terrain, two major river valleys, extensive farmland and urban areas. Most of the forested area is cloud forest (Yungas), rich in biodiversity as well as being a major source of timber. In 1999, a small group of volunteers began to hold open community workshops and meetings with organizations from a variety of sectors to promote the idea of creating a Model Forest in Jujuy.

It was a difficult time in Argentina's history, a time of crisis, uncertainty and discontent with the country's political leadership. The volunteers worked for two years through workshops designed to explain the Model Forest philosophy and its potential for creating an organization that is participatory, open and focused on finding concrete solutions to the issues faced by the stakeholders. In 2002, the Jujuy Model Forest was established and accepted into the International Model Forest Network.

Today the Jujuy Model Forest is a successful collaboration of over 30 partner organizations and has many projects underway. Examples include development of criteria and indicators of sustainable forest management (in collaboration with Canada), establishment of a forest seedling nursery and a seed bank of native tree species, forestry education in elementary schools, and tree planting.

These plans are contributing to integrated landscape management and cooperation among stakeholders, as well as strengthening governance and decision-making through community participation.

For a full description of the work of the Jujuy Model Forest, see www.bmj.org.ar/index.php



Two rural inhabitants of Jujuy Model Forest sharing goat cheese they made, with a member of the Jujuy Model Forest technical team. From left to right: Doña Rosa Mendoza, Don Bauza and Iván Escalier (Jujuy MF member)

#### CASE STUDY

#### Costa Rica's Reventazón Model Forest: Strengthening Development of Conservation and Protected Areas

The Reventazón Model Forest occupies a geographically and culturally diverse region in the province of Cartago in the central region of Costa Rica. The Model Forest includes rare virgin cloud forest, active volcanoes, several national parks and an important archaeological site, as well as highly populated suburban and industrial areas and extensive agricultural land.



The Model Forest has provided opportunities for implementing many of the country's conservation policies and several international initiatives. Begun as part of the Mesoamerican Biological Corridor project, the Model Forest has supported development of the Talamanca Central Volcanic Biological Corridor and the Ribereño Interurbano Subcuenca Reventado Agua Caliente Biological Corridor. By strengthening these two biological corridors, the Model Forest is promoting ecosystem connectivity in addition to community participation and cross-sectoral planning with local environmental organizations. The corridors assist in creating social agreements that promote the conservation of biodiversity and the sustainable use of natural resources, while also improving the quality of life of residents in the surrounding areas.

A diverse organic farm in Reventazón Model Forest. Costa Rica



#### Chile's Araucarias del Alto Malleco Model Forest: Economic Diversification through Local Products

Since December 2008, local economic diversification has been the focus of the Araucarias del Alto Malleco Model Forest in Chile. Following award-winning research on the piñon, a fruit of the protected *Araucaria araucana* tree, the Model Forest developed a program that aims to improve the local economy using non-timber forest products such as the piñon, rosehips and mushrooms. Success was achieved though streamlining the production chain, bringing together

collectors, formalizing the legal status of an all-women entrepreneur group, placing value-added products in the marketplace and increasing local identity. The program emphasizes that community involvement in the sustainable use of natural resources can foster local development.

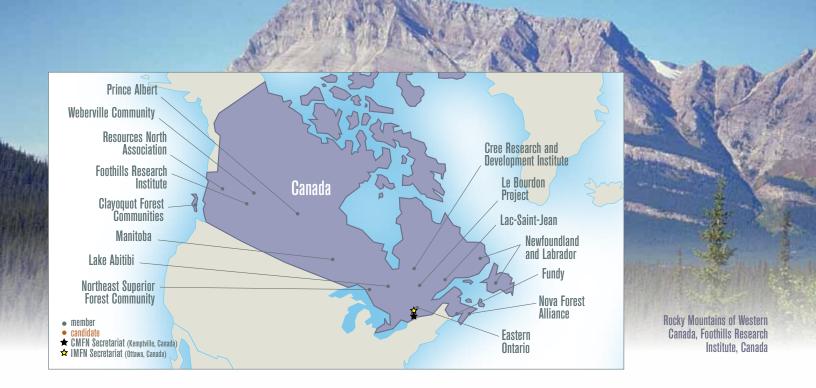
# CASE STUDY Canada-Argentina Collaboration on Developing Local-Level Criteria and Indicators for Sustainable Forest Management

The desire to measure and track their progress toward the goal of sustainability is driving countries to experiment with varying reporting frameworks. Since 2007, the Argentinean and Canadian Model Forest Networks have been collaborating to transfer Canadian Model Forest experiences in the development and implementation of local-level indicators for sustainable forest management. The work, both in Canada and Argentina, is enhancing capacity to report on the impacts of forest management activities at a local level within a framework based on global criteria.



C&I workshop, Argentina

lop: Araucaria araucana trees in the Araucarias del Alto Malleco Model Forest. Chile



# The Canadian Model Forest Network

#### Development of the Canadian Model Forest Network

The Model Forest concept was developed in Canada in the early 1990s by the Canadian Forest Service in response to a need for a forest management approach that would take into account the environmental, social and economic aspects of the forest. Canada's Model Forest Program was announced in 1991 and an initial 10 Model Forests were selected through a competition.

Since then, a number of additional Model Forests have been developed and others have completed their work and no longer exist. Today, the Canadian Model Forest Network (CMFN) is a not-for-profit corporation with a Board of Directors and 15 member Model Forests. The Model Forests encompass 125 communities and involve more than 1 100 forest stakeholders. Canadian Model Forests cover more than 65 000 000 hectares, with representation in all Canadian provinces. Over 270 indigenous and nonindigenous communities (amounting to a population of more than 975 000) are involved with Model Forests across Canada. The CMFN's vision is "Sustainable Forests; Sustainable Communities," which truly reflects the goals Model Forests are looking to achieve.

#### National Focal Areas for the Canadian Model Forest Network

Every Model Forest is unique, with respect to its priorities, community characteristics, partners and activities, but many similarities do exist. The CMFN works to bridge the commonalities between its members by finding programs that are of interest to a number of regions, forest-based communities and partners. From this process, a suite of national, network-level initiatives has emerged.

Two early programs that achieved success focused, on local-level indicators of sustainable forest management and on engagement of woodlot owners and managers of small forested lands. Currently, the network has the following seven national-level strategic initiatives.

#### Bioenergy

Resources are being developed to assist communities considering developing bioenergy facilities, including a guidebook that will provide an overview of current information, research and policy, and a web-based source of policy information and case study examples of current activities. A planned project is the development of a tool that will allow communities to assess the potential success of a bioenergy facility in their region.



#### Canadian Cirumboreal Program

Model Forests based in Canada's boreal region are developing partnerships with Model Forests in other circumboreal countries around the globe. They are working to address forest management issues in the context of concerns such as climate change and changes in the forest sector.

# Community Transition and Development

The network is developing a workbook to help leaders in resource-dependent communities assess current conditions, as well as choose the best methods for addressing current and future challenges they face with respect to changing economic conditions.

#### **Ecological Goods and Services**

Through collaboration with the Canadian Federation of Woodlot Owners and the Canadian Federation of Agriculture, the network is exploring incentives and markets for protecting ecological goods and services, and options for offsetting the costs of voluntary actions of forest managers, landowners and farmers. The program will include a number of local-level projects across Canada, as well as examining options for policy development.

#### International Knowledge Transfer

The CMFN will continue to share its experiences with other members of the International Model Forest Network and seek to learn from members of other regional networks. Canadian Model Forests are currently involved in collaborative projects with Model Forests in Argentina, Cameroon, Chile, Costa Rica, Russia and Sweden.

Top: A moose in Manitoba Model Forest, Canada

Bottom: Collecting birch sap to make syrup in Nova Forest Alliance, Canada

#### Non-Timber Forest Products

The network produced a report on non-timber forest product (NTFP) activities in Canada, supported workshops across the country and recently released a report summarizing the workshop discussions on challenges and solutions in creating and meeting demand for NTFPs.

#### Youth Education and Training

The Youth Education and Training initiative encourages young people from Canadian communities, and in particular from indigenous communities, to develop new skills and find opportunities in the new forest economy, allowing them to bring their important perspectives to future forest management planning processes.

#### **Looking Forward**

Over the past decade, the forest sector in Canada has undergone an economic crisis that has profoundly affected rural communities. Members of the CMFN have taken a lead role in redeveloping the economies of Model Forest communities, focusing on capacity building and helping to develop integrated, multi-sector approaches to forest management.

Through research and other activities to advance the many aspects of sustainable forest management, Canada's Model Forests will continue to develop resources, connect stakeholders and provide expertise and knowledge-sharing opportunities for forest-based and resource-dependent communities, both within and outside Canada. This will support communities in addressing challenges and making wise decisions, now and in the future.

#### **Milestones**

| 1991 | Canada's Model Forest Program announced by the Government of Canada  |
|------|--|
| 1992 | 10 Model Forests launched across the country Canada's Prime Minister announces the International Model Forest Program and, at the United Nations Conference on Environment and Development, Rio de Janeiro, invites other countries to join Canada in establishing Model Forests   |
| 1993 | Canadian Model Forest Network Secretariat established at the Canadian Forest Service   |
| 1997 | Waswanipi Cree Model Forest established (the first indigenous-led Model Forest to join the CMFN)   |
| 1998 | Nova Forest Alliance established   |
| 2002 | Long Beach Model Forest closes   |
| 2004 | Prince Edward Island Model Forest project established as an adjunct of Nova Forest Alliance  |
| 2006 | Canadian Model Forest Network becomes a independent NGO with a Board of Directors  |
| 2007 | Bas-Saint-Laurent Model Forest closes Four new Model Forests join: Clayoquot Forest Communities, Lac-Saint-Jean Model Forest, Le Bourdon Project and Northeast Superior Forest Community Several Model Forests renamed or realigned: McGregor Model Forest becomes Resources North Association Western Newfoundland Model Forest renamed |
|      | the Model Forest of Newfoundland and Labrador  |
|      | Foothills Model Forest renamed the Foothills Research Institute  |
|      | Waswanipi Cree Model Forest becomes the Cree Research and Development Institute  |

Weberville Community Model Forest established, bringing the number of Model Forests 2010 in the network to 15

#### **Building Relationships in the Northeast Superior Forest Community**

In 2008, in recognition of the growing need to accommodate indigenous interests in all resource decision-making, the Northeast Superior Forest Community facilitated a relationship-building process between the mayors and the chiefs of the area. The resulting relationship between the municipalities and the First Nations in the Model Forest is unique in Canada.

The partnership has equal input into the Model Forest's activities, which include education activities for elementary school students, exploration of alternative energy products, development of non-timber forest products, and a blueberry network using a cooperative model.

# CASE STUDY Canada's Model Forests and Non-Timber Forest Products: Sharing Knowledge, Creating Opportunities



With conventional forest and other resource industries in decline in many parts of Canada, there is growing recognition of the need to identify alternative sources of income in forest-dependent communities, especially opportunities with limited ecological impacts. In addition to network-level activities, many of Canada's Model Forests have been involved in non-timber forest product (NTFP) projects:

- Lac-Saint-Jean Model Forest has a multi-year program for NTFP development, including
  an inventory of wild mushroom resources and a guide to edible wild mushrooms, an
  evaluation of the potential for collecting and processing birch sap, and promotion of joint
  production of trees and blueberries in an agroforestry system
- Resources North Association undertook a variety of NTFP-related projects in partnership
  with the Centre for Livelihoods and Ecology at Royal Roads University, Victoria, British
  Columbia, producing a national compendium on law and policy related to NTFPs, and a
  searchable online directory of key players in the sector
- Model Forests in Atlantic Canada were involved in the development of the first NTFP
  directory for that region, From Our Atlantic Woods. The directory includes NTFP producers
  and service providers from all of the Atlantic Provinces, as well as the state of Maine in
  the United States
- The Northeast Superior Forest Community is planning to create blueberry agroforestry
  production projects in each of the six communities within its territory

Top: Maple syrup from a certified forest in Eastern Ontario Model Forest, Canada

Bottom: Edible mushrooms growing in Lac-Saint-Jean Model Forest, Canada

#### Achieving Forest Certification in the Eastern Ontario Model Forest



Since 1999, the Eastern Ontario Model Forest (EOMF) has worked with the Forest Stewardship Council (FSC) to develop a collaborative certification process for both private land and community forests. The process allows for numerous landowners and community forests to share the benefits and costs of certification by certifying their lands as one unit with one certificate. The certificate is managed by the Eastern Ontario Model Forest on behalf of the private owners and community forest managers. Their current certificate covers more than 6 500 hectares of privately owned forest and 35 000 hectares of community forest, including two distinct forest owners groups representing over 100 forest owners. The EOMF was also the first organization in Canada to sell FSC-certified maple syrup as a non-timber forest product.

Limerick Forest, FSC certified and an partner of the Eastern Ontario Model Forest, Canada



#### CASE STUDY

#### Model Forest of Newfoundland and Labrador: Shining a Positive Light on Forestry and Education

To offset a decline in post-secondary forest education programs, the Model Forest of Newfoundland and Labrador and its partners have developed a series of teaching and learning tools to increase awareness of sustainable forest management among students in the provincial school system and the general public. The tools are available to teachers and forest practitioners in Newfoundland and Labrador to use in their classroom activities, with the goal of promoting a positive attitude towards forestry.

Above: **Envirothon members from** the Model Forest of Newfoundland

#### CASE STUDY **Foothills Research Institute: Understanding Grizzly Bear Populations**

The Grizzly Bear Program of the Foothills Research Institute in Alberta provides knowledge and planning tools for land and resource managers to ensure the long-term conservation of grizzly bears. Key to its efforts are sound scientific field research, a focus on gaining practical results, and a large-scale or "landscape level" approach to grizzly bear conservation.



Grizzly bear research supported by the Foothills Research Institute. Canada

#### **International Partnership Projects**

Canadian Model Forests are working with Model Forests worldwide, sharing knowledge and expertise. For example:

- Manitoba Model Forest is working with the Reventazón Model Forest, Costa Rica, on ethno-cultural tourism by developing management plans and establishing capacity, infrastructure and technology to develop the business, as well as providing the training and education of youth and women for future leadership
- Lac-Saint-Jean Model Forest is working with two Model Forests located in Cameroon, to promote the harmonization of forest use and other integrated land management activities
- Prince Albert Model Forest is working with the Araucarias del Alto Malleco Model Forest, Chile as a bridge to facilitate information and knowledge exchange between the two Model Forest partners and develop a future collaborative exchange program



Members of Manitoba and Reventazón Model Forests working together



#### CASE STUDY **Canadian Model Forests Partnership:**

# Establishing a Caribou Knowledge Network

A Canadian Model Forests partnership – of Manitoba Model Forest, Prince Albert Model Forest, Foothills Research Institute, and Resources North Association – has been working with researchers, wildlife managers and provincial government departments on woodland caribou research, management and recovery planning. The western populations of this species are listed as "Threatened" under Canada's *Species at Risk Act* and these groups are working collaboratively to bridge the gaps between individual jurisdictions. This will allow the sharing of technologies and methods for research and stakeholder engagement, and will ensure that science informs land management decisions for healthy populations and recovery efforts.

Canadian Caribou

#### CASE STUDY

#### First Nations Engagement in Clayoquot

The Clayoquot Forest Communities is focused on economic diversification, innovation, the building of strong local institutions, and development of an ecosystem-based management approach to resource use. Five communities are involved in the Model Forest: the First Nations of Ahousaht, Hesquiaht, Toquaht, Ucluelet and Tla-o-qui-aht, and the Municipal Districts of Ucluelet and Tofino.



# The Mediterranean Model Forest Network

#### Development of a Regional Model Forest Network in the Mediterranean Basin

The Mediterranean landscape is characterized by high population density, major human impacts over the past 2 000 years and a high proportion of privately owned lands over publicly owned lands, particularly on the northern rim. Sustainable forest management in the region must therefore address such factors as the relevance of regional and local governments in forest management, the reality of impacts caused by climate change and the importance to the region of such critical issues as non-timber forest products and services.

The Urbión Model Forest was established in 2006 in Spain's Castile and León region. While the Model Forest initially became a member of the Ibero-American Model Forest Network, there was also a vision to expand Model Forest development throughout the Mediterranean region with its unique forests and landscapes. Since the 2008 establishment of the Mediterranean Model Forest Network, 13 regions and countries have joined and are in the process of developing Model Forests. Since 2010, two Model Forests - Ifrane in Morocco and Yalova in Turkey - have been accepted by the International Model Forest Network (IMFN) as Candidate Model Forests.



Left: Atlas Cedars. Ifrane Model Forest, Morocco

Right: Ifrane Model Forest, Morocco

#### Members of the Mediterranean Model Forest Network:

Region of Castile and León (Spain)

Region of Murcia (Spain)

Region of Corsica (France)

Region of Provence-Alps-Costa de Azul (France)

Region of Sardinia (Italy)

Region of Tuscany (Italy)

Region of Istria (Croatia)

Prefecture of Magnesia (Greece)

Region of Western Macedonia (Greece)

Turkey

Morocco

#### **Model Forest Activities and Regional Priorities**

The central focus of the Mediterranean Model Forest Network has been initiating activities to support the principles of effective, low-cost decentralization, cooperation, solidarity and equity among participants.

The EU-funded Project MED Forêt Modèle, initiated in January 2009, is aimed at developing a Model Forest in each participating European region. The project involves:

- Illustrating how the Model Forest concept can be applied in the socio-economic and ecological context of the Mediterranean region
- Developing a strategy for the Mediterranean Model Forest Network to promote Model Forests as an innovative and original tool for territorial governance of forest-dominated landscapes. and to integrate this tool into European regional policies

#### **Looking Forward**

During the 2010 regional Model Forest network meeting (Medforum), climate change and cork oak production and marketing were identified as two key thematic programming areas for Model Forests in the region.

#### Climate Change

In addition to developing links with existing adaptation and mitigation strategies underway in the Mediterranean region, the following priorities were identified:

- Strengthening the technical and financial capacities of Mediterranean Model Forest Network members, focusing on climate change adaptation and mitigation strategies
- Putting in place a common approach to silviculture, taking into account conservation of water resources
- Establishing an arboretum network to preserve genetic resources in the Mediterranean basin
- Promoting the inclusion of biotic and abiotic factors in research on ecosystem dynamics
- Monitoring of biodiversity and landscape conditions

### Cork Oak

A working group has been established to build partnerships between cork producers in Model Forests of the region. The working group is addressing several areas of common concern in cork production and marketing, focusing on:

- Building capacity through technology transfer (e.g., new efficient cork harvesting techniques) and promotion of best practices
- Improving management and production of cork operations
- Implementing adaptation in response to climate change
- Developing a common marketing strategy
- Establishing a databank of information about cork oak forests
- Researching new cork applications and uses
- Promoting a Mediterranean alliance among all stakeholders involved: forestry departments, regions, the private sector, non-governmental organizations and research experts

### **Milestones**

| 2006 | Urbión Model Forest established in the Castile and León region, Spain   |
|------|---|
| 2008 | Mediterranean Model Forest Network (MMFN) launched  |
| 2009 | MMFN and the Mediterranean Regional Office of the European Forest Institute sign a Memorandum of Understanding on developing Model Forests in the region  |
| 2010 | Ifrane Model Forest, Morocco, accepted as candidate Model Forest  MMFN joins the Collaborative Partnership on Mediterranean Forests, along with United Nations Food and Agriculture Organization's Sylva Mediterrenea and other major governmental and non-governmental organizations in the region |
| 2011 | Yalova Model Forest, Turkey, accepted as candidate Model Forest   |

Left: Cork trees in Tunisia

Right: Making wine bottle corks from cork bark in Tunisia





Scots pine (*Pinus sylvestris*) in Urbión Model Forest, Spain

## Urbión Model Forest, Spain

The Urbión Model Forest, located in the region of Castile and León, Spain, was created in 2006 in one of the most extensive continuous wooded areas on the Iberian Peninsula. The forests of Urbión have provided well over half of its inhabitants with employment for centuries. Timber from the native Scots pine (*Pinus sylvestris*) of the area is harvested and processed, and edible mushrooms and other non-timber forest products are gathered. These activities, along with woodland recreation, form the basis for the sustainable development of this forested landscape.

The Model Forest has created an online information system to help local municipalities improve the sale of wood from sustainably managed forests. Information is now available that shows the location of woodlots, the tracks and roads used to transport wood, and various distribution plans. This information system simplifies the registration process for companies that bid on lumber at municipal auctions, which in turn facilitates the marketing of wood within the Model Forest.

### Yalova Model Forest, Turkey

The Yalova Model Forest in Turkey was accepted as a candidate by the IMFN in February 2011. Encompassing a region that has a high capacity for tourism and non-timber forest product development (e.g., mushrooms, honey, medicinal and aromatic plants and fruit

production), this Model Forest's goal is to work towards sustainable management of the landscape while promoting the development of timber and non-timber forest products and tourism.



Women harvesting lavende in Ifrane Model Forest

### Ifrane Model Forest, Morocco

Ifrane is the first Model Forest to be identified in Morocco. The Ifrane Model Forest was accepted as a candidate by the IMFN in July 2010. Situated in a unique and fragile ecosystem in the Middle Altas region, the Model Forest has the following objectives:

- Support sustainable development of natural resources and landscapes
- Conserve and valorize of biodiversity and natural ecosystems
- Contribute to improving local socio-economic conditions
- Create value from natural resources
- Raise awareness through education on the environment and sustainable development



# The African Model Forest Network

# Development of a Regional Model Forest Network in Africa

The Congo Basin in Central Africa is home to the second largest area of humid tropical forest on the planet, after the Amazon region. Forest degradation, however, is a major issue in many areas, often as a result of pressures from mining and logging as well as from population growth and poverty.

> In the African context, Model Forests are seen as long-term change vehicles owned and governed by local stakeholders. This arrangement gives the stakeholders the ability to go beyond the usual short-cycle project schemes while making the best use of both local and external resources.

Cameroon contains a significant portion of the forests of the Congo Basin. With almost 90 % of Africa's ecosystems represented in Cameroon, the biodiversity of the country's humid forest zone is considered to be one of the richest in central Africa. Forestry plays a key role in Cameroon's social fabric, providing employment, recreation and cultural identity. Cameroon is also the largest exporter and second largest producer of forest products in Africa.

> — Joachim Nguiebouri and Chimère Diaw African Model Forest Network Secretariat, Cameroon

Forest policy reforms were introduced by the Cameroon government in the mid-1990s to

address the problems of resource degradation, but were having limited success because of implementation difficulties. Then, in 2002, the Center for International Forestry Research (CIFOR) approached the International Model Forest Network (IMFN) Secretariat with the idea of collaborating on Model Forest development in Cameroon.

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Together, CIFOR and the IMFN introduced the Model Forest approach to the region, working with Cameroon's forest administration, local partners and a host of international agencies, including the Canadian International Development Agency, the Central African Forest Commission, the International Union for Conservation of Nature, and the Food and Agriculture Organization of the United Nations. In 2005, two Model Forests were identified – Campo Ma'an in the south and Dja et Mpomo in the east – to serve as pilot sites for the entire Congo Basin.

Since 2005, Campo Ma'an and Dja et Mpomo have established governance and management structures, formalized partnerships (local, regional and international) and initiated a variety of local projects aimed at building the capacity of

The African Model Forest Network is using the lessons learned from the Model Forests in Cameroon to support the expansion of the Model Forest concept in other countries on the continent.

local people to develop sustainable, incomegenerating enterprises. Strategic planning exercises have used processes that aim to ensure that all voices are heard, including those of women, indigenous peoples and other marginalized groups who live there.

The African Model Forest Initiative was launched in 2009 by Natural Resources Canada and is managed by the IMFN Secretariat. It aims to improve the conservation and sustainable management of forest-based natural resources in francophone Africa, including the Congo Basin and Mediterranean regions, through Model Forests.

This initiative is supporting an African Model Forest Network Secretariat established in 2009 in Yaoundé, Cameroon, to build on the pilot work in two Model Forests in Cameroon. The objective is to show the value of the Model Forest approach in the African context, and to create a viable African Model Forest Network by 2013.

### The African Model Forest Initiative

Funded by Canada, the African Model Forest Initiative is supporting activities in five key areas:

- Establishing Model Forests in the Congo Basin and francophone Mediterranean regions of Africa (Morocco, Tunisia and Algeria)
- Developing a network in each of these regions through which Model Forest practitioners can share knowledge and innovations that will strengthen policy, regulation and development at the community, local and regional levels
- Promoting and supporting alternative economic opportunities for local people to enhance community development and the sustainable management of local forest resources
- Building capacity and supporting innovation in the sustainable management of local resources
- Documenting and sharing lessons learned from all aspects of the initiative with others in the regions and throughout the IMFN

## **Looking Forward**

The African Model Forest Network is using the lessons learned from the Model Forests in Cameroon to support the expansion of the Model Forest concept in other countries on the continent. Work is already moving ahead quickly in the Democratic Republic of Congo following the launch in 2010 of Model Forest development processes in three provinces of the country. Other processes are at an early stage in the Republic of Congo and other countries in central and western Africa. And at the ninth session of the United Nations Forum on Forests held in New York in early 2011, the IMFN Secretariat announced that it would be assisting Rwanda in developing the Model Forest approach under the auspices of its Forest Landscape Restoration Initiative.

To better support these new processes, the IMFN Secretariat is developing exciting collaborations with partners such as the International Union for Conservation of Nature and its Global Partnership on Forest Landscape Restoration, the International Tropical Timber Organization, and the United Nations Forum on Forests Secretariat, among others.

### **Milestones**

| 2005 | International Model Forest Network designates Campo Ma'an and Dja et Mpomo as |
|------|---|
|      | Model Forests   |

**2006** First General Assemblies of Campo Ma'an and of Dja et Mpomo

**2008** Memorandums of Understanding signed with World Wildlife Fund, International Union for Conservation of Nature, and the Canadian Model Forest Network

2009 Collaboration begins between the Campo Ma'an and Dja et Mpomo Model Forests in Cameroon and Canada's Lac-Saint-Jean Model Forest

The African Model Forest Network is established, with a regional Secretariat based in Yaoundé, Cameroon

2010 National committee established to support Model Forest development in Democratic Republic of Congo

Representatives from the Africa Forests Research Initiative on Conservation and Development (AFRICAD) and Canada's Lac-Saint-Jean Model Forest, University of British Columbia and FPInnovations examine opportunities for collaborating to stimulate small enterprise development in Cameroonian Model Forests

2011 IMFN announces its intent to work with Rwanda in the context of its Forest Landscape Restoration Initiative

Left: Wood harvested and cut in Cameroonian Model Forest

Right: Women from the Model Forests in Cameroon sell their locally made products during an agricultural fair



### CASE STUDY

### **Protecting Biodiversity and Providing Income**

Once abundant in Cameroon's forests, giant African snails were consumed only by village elders, a convention that protected the snails from over-harvesting and helped guarantee the continuity of the species. Today, however, snails are much in demand because they are high in protein and the amino acid lysine (sold in supplement form for its various health benefits). Snail by-products are also used in the production of animal food.

Heliciculture, or the raising of snails, is contributing to the sustainable management of the Campo Ma'an Model Forest. A heliciculture project has been initiated in the Campo Ma'an Model Forest with the aim of protecting giant African snails and providing an alternative source of food and income for local residents, which in turn reduces poaching. Raising snails also helps to promote the proliferation of earth worms, further enriching the soil and contributing to conservation efforts.

Research on the giant African snails is continuing in the Campo Ma'an Model Forest, as is further exploration of ways to sustainably develop heliciculture in order to benefit local communities.



Giant African snail farming in Campo Ma'an Model Forest, Cameroon

### CASE STUDY

### Better Living from the Forest through International Collaboration

They are thousands of kilometres apart, but the Campo Ma'an and Dja et Mpomo Model Forests in Cameroon and the Lac-Saint-Jean Model Forest in Canada are united in a common cause: building a forest-based economy through collective management of their resources. Through financial support from the African Model Forest Initiative, the three Model Forests have been collaborating closely since 2008.

In January 2009, the general manager of the Lac-Saint-Jean Model Forest travelled to Cameroon with a wood lathe, sandpaper, urethane glue, chisels and 200 pen mechanisms. He trained three skilled carpenters in the produciton of producing wooden pens from exotic wood residues, left over from logging operations in the Dja et Mpomo Model Forest. The project quickly translated into a much-needed economic boost for the carpenters who, within 10 months, had sold more than 700 pens at US\$20 each, trained two additional carpenters and reinvested the earnings in the business. It also inspired other Model Forest partners to look at other forest goods they could sustainably produce and market, such as edible giant snails.

In September 2010, representatives from the Lac-Saint-Jean Model Forest and FPInnovations (the world's largest private, not-for-profit forest research institute) and researchers from the University of British Columbia and the AFRICAD network visited Campo Ma'an and Dja et Mpomo. They met with Model Forest partners to discuss new ways to stimulate economic development and entrepreneurship. They also visited sawmills, woodworking plants, a hevea (rubber) processing plant, community forests, nurseries and heliciculture projects.

The visit opened new avenues for collaboration and the three Model Forests plan to continue to work together in areas such as forest inventory, certification, marketing and distribution.

The making of wooden pens in Dja et Mpomo Model Forest, Cameroon





# The Regional Model Forest Network - Asia

In many regions of the world, protecting and managing forests sustainably depends on social and economic policies that provide income-generation opportunities beyond forest harvesting or forest clearing for agriculture. For the 430 million people who depend directly on Asia's forest resources for all or a substantial part of their livelihoods, there is a delicate balance between meeting their livelihood needs and addressing the significant pressure that these subsistence activities exert on the landscape. In Asia there

are increasing pressures on forest resources from many sources, including livestock grazing and the collection of fuel wood, building materials and non-timber forest products (such as charcoal).

Successful Model Forest development and regional program implementation across Asia confirm that large-scale partnerships for sustainable development can work in a variety of cultures, landscapes and economic scenarios.



Left: Terraced agriculture in Margowitan Model Forest, Indonesia

Right: Local community members are allowed to grow porang, a high-value crop, in the teak plantations in the Margowitan Model Forest, Indonesia Model Forests in Asia provide a strong stake-holder- and community-based approach to natural resource management. Although community-based approaches in the Asia region are not unique, what sets them apart is that they are generally enshrined in national legislation. Model Forests in Asia provide a link between national government focal points and local-level organizations, facilitating stakeholder dialogue and in turn opens doors to opportunities to strengthen governance and collaborative planning. This explicit link between national-level policy-makers and operations at the landscape level provides Model Forests with the opportunity to influence national policy.

Beyond the influence that they can exert on existing national policies, Model Forests also offer discrete and cost-effective testing grounds for national initiatives. Involvement of governments in the Model Forest development process has enabled national-level policy testing and development to be directly linked with on-the-ground demonstration.

## Development of a Regional Model Forest Network in Asia

The promotion of Model Forests in Asia began in 1997 when China initiated development of the Lin'an Model Forest, which was formally established in 1999.

Also in 1999, the government of Japan provided a grant to the United Nations Food and Agriculture Organization (FAO) in support of Model Forest development in China, Thailand, the Philippines and Burma (Myanmar). This two-and-a-half-year project had its roots in a series of international workshops initiated by the Forestry Agency of Japan, held between March 1998 and October 2000, entitled the "Model Forest Approach for Field-Level Application of Sustainable Forest Management." A follow-up evaluation found the FAO project to have been timely and relevant, producing broadly positive results.

<sup>1</sup> Lai, K.C., Ishida, K. and Canonizado, J. (2002). Terminal evaluation report of FAO project GCP/RAS/177/JPN - Assistance for the Implementation of the Model Forest Approach. Bangkok, Thailand: FAO Regional Office for Asia-Pacific.

With the establishment of Model Forests in these countries, an informal regional network emerged. As well, a regional secretariat based at the FAO during the project carried on and continues to be an active partner in development of the regional network and Model Forests. In addition to the critical support provided by national governments, funding is also provided by the Government of Canada and the International Development Research Centre.

Over the first several years, the main focus of regional activities was on capacity building within the Model Forests. At regional workshops, Model Forest representatives met to discuss ways to strengthen capabilities in a range of areas, such as resource mobilization, criteria and indicators (C&I) for sustainable forest management, forest policy and related legislation, and project monitoring and evaluation. Strategic planning workshops were also held. Subsequent development at the site level focused strongly on the continued exploration and use of the Model Forest governance approach. During this period there was also an emphasis on economic development projects using sustainably managed forest resources.

In March 2010, an Asia Regional Model Forest Network (RMFN – Asia) office was officially opened in Beijing. This new regional Secretariat facilitates the ongoing governance of Model Forests in Asia and communicates site-level activities to regional and international audiences, while at the same time supporting the maintenance and expansion of the regional network. Hosted by the Chinese Academy of Forestry, the office is co-located with the newly established Secretariat

Beyond the influence that they can exert on existing national policies, Model Forests also offer discrete and cost-effective testing grounds for national initiatives.

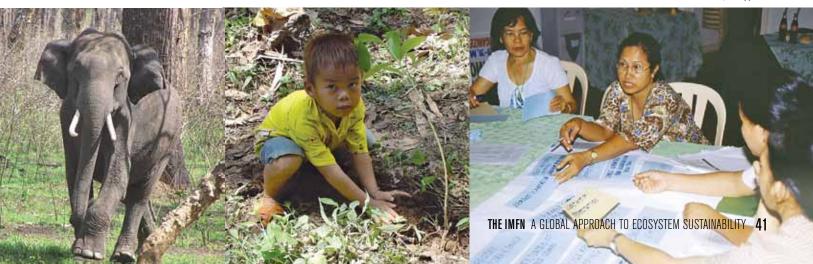
Involvement of governments in the Model Forest development process has enabled national-level policy testing and development to be directly linked with on-the-ground demonstration.

of the Asia-Pacific Network for Sustainable Forest Management and Rehabilitation, set up to promote sustainable forest management in the Asia-Pacific and APEC regions.

> Left: Elephant in Kodagu Model Forest, India

Middle: Young tree planter, Ngao Model Forest, Thailand

Right: Training in Ulot Watershed Model Forest, Philippines



# Asia Model Forest Regional Priorities and Activities

The Model Forests of the RMFN – Asia are collectively working towards a vision in which:

- Forest resources in Asia are managed sustainably
- Local people are able to make use of forest resources for better lives
- Concerned individuals, agencies, groups, organizations and institutions work together to ensure the sustainable management of forests and other resources within the region

To realize that vision, members of the RMFN—Asia have agreed to focus their collective efforts on two priority themes: ecological goods and services, and integrated landscape management. Under these two themes, six types of site-level activities have also been identified. For these, individual Model Forests are now coordinating their research and demonstration efforts.

# Regional Priority Themes and Activity Focus Areas

### **Ecological Goods and Services**

Exploring ecological goods and services provided by forests

### **Integrated Landscape Management**

Promoting poverty alleviation and food security

Enhancing forest cover and biodiversity conservation

Ensuring water security

Improving governance and law enforcement for sustainable forest management

Assessing climate change vulnerability and facilitating community adaptation

Kodagu Model Forest, India





# **Looking Forward**

In the coming years, the RMFN – Asia will focus on the following four main strategies to achieve their objectives in each theme area: capacity building, networking and knowledge sharing, promotion of the Model Forest approach, and research. At the same time, they will combine with the regional pilot projects already underway as part of two of the IMFN's strategic initiatives - Ecological Goods and Services, and Climate Change.

Both the regional network and the individual Model Forests are also continuing to expand and mature, with increasing collaboration on projects occurring between Model Forests within the region and between the region and key regional forestry organizations. Successful Model Forest development and regional program implementation across Asia confirm that large-scale partnerships for sustainable development can work in a variety of cultures, landscapes and economic scenarios.

### **Milestones**

| 1998 | Forest Agency of Japan sponsors international workshop series on "The Model Forest |
|------|--|
|      | Approach for Field-Level Application of Sustainable Forest Management"             |

1999 Lin'an Model Forest established in China Government of Japan sponsors regional Model Forest project through the FAO's Asia-Pacific office in Bangkok, Thailand

2000 Ngao Model Forest established in Thailand Ulot Watershed Model Forest established in the Philippines Paukkhaung Model Forest established in Burma (Myanmar)

2002 Berau Model Forest established in Indonesia

2004 Margowitan Model Forest established in Indonesia National-level launch of Model Forests in Indonesia

2006 Paukkhaung Model Forest closes

2009 Regional Model Forest Network - Asia office opened by the Government of China's State Forestry Administration Berau Model Forest in Indonesia closes

2010 Carood Watershed Model Forest established in the Philippines

2011 Kyoto Model Forest established in Japan

> First CUSO-VSO cooperant volunteers start work in Carood and Ulot Watershed Model Forests, Philippines

Top left: Shade-grown coffee in Kodagu Model Forest, India

Top middle: Margowitan Model Forest, Indonesia

Top right: Bamboo, Lin'an Model Forest, China



# CASE STUDY Building National Strategies on Local Success in the Philippines

Since its establishment in 2000, the Ulot Watershed Model Forest has been used to develop and test on-the-ground applications for several national-level initiatives. For example, the Model Forest acted as a landscape-level pilot for identifying criteria and indicators (G&I)

of sustainable forest management. The success of the C&I pilot project was then transferred to the national C&I program and subsequently used in various forest management units around the country.

# CASE STUDY Training and Capacity Building

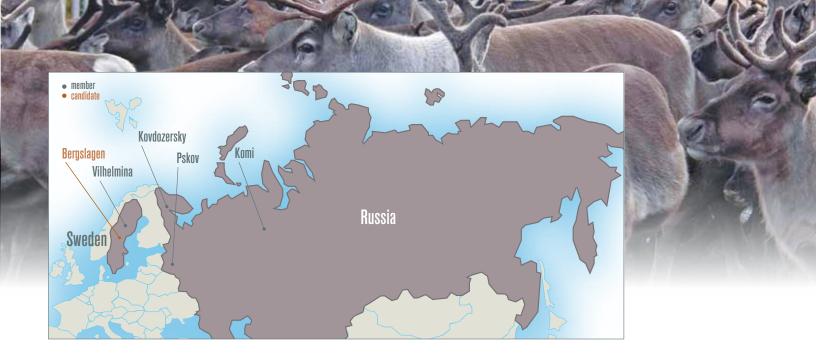
Since 1999, Lin'an Model Forest in central China has offered workshops to farmers on the cultivation and processing of bamboo shoots, hickory nuts and tea. The workshops are unique in China as they work towards enhancing sustainable management practices by providing a comprehensive skills training program that included three elements:

- Establishing a demonstration bamboo plantation for vocational training
- Developing capacity building courses on cultivating and processing bamboo shoots, hickory nuts and tea
- Working with the local Rural Cooperation Bank to establish a small loans program for the disabled once they are trained

Since training began, more than 600 persons have benefited from the training and the small loans program. For example, through the "Association of Disabled Peoples of Lin'an" – a stakeholder organization that participates in the Model Forest – workshop participants received small loans and free tree stock to assist them in establishing their farms. Household survey data collected clearly demonstrates that participating households have risen above the poverty line, as their average annual income was shown to have tripled.

Top left: **Ulot Watershed Model Forest, Philippines** 

Top right: Harvested bamboo ready for processing in Lin'an Model Forest, China



# Russia and Northern Europe

Russia was the first country to accept Canada's invitation to develop Model Forests when it created the Gassinski Model Forest in Khabarovsk Krai in 1994. Located in the Russian Far East, the Gassinski Model Forest helped to establish the first national park in the region, enhance employment for the indigenous Nanai people, and introduce the use of criteria and indicators of sustainable forest management.

In the first five years of its existence, work included substantial data acquisition and analysis. This was then used by the partners of the Model Forest to develop a long-term sustainable development strategy

for the broader region of the Model Forest. The government of Khabarovsk Krai adopted this as the official development strategy.

In the European part of Russia, a number of individual landsdcape-level and partnership-based initiatives emerged that were initially unaffiliated with the International Model Forest Network. However, in 2007, representatives of four sites –

Other countries within the Baltic Sea region have also turned their attention to the Model Forest approach, seeing it as an innovative way to advance the sustainable management of forests and landscapes.

Komi, Pskov, Kovdozersky and Kologrivski – met in St. Petersburg, Russia, with representatives of the Gassinski Model Forest and the Federal Forest Agency to discuss working together and developing an informal national network as part of the IMFN. An agreement was struck and work continues today to explore other options for Model Forest development in Russia, including through affiliation with neighbouring countries in the Baltic Sea region and with other boreal nations who are members of the IMFN. Sweden joined the IMFN in 2004 when the Vilhelmina Model Forest was established. Since then, other countries within the Baltic Sea region have also turned their attention to the Model Forest approach, seeing it as an innovative way to advance the sustainable management of forests and landscapes, including addressing issues such as participatory processes, conservation and the sustainability of resource-based communities.

In 2006, with funding from the European Union's Baltic Sea Region Interreg Neighbourhood Programme, the "Baltic Forest Project" was developed. Its purpose was to explore how the Model Forest concept might be promoted in northern Europe as a complement to already existing landscape-level initiatives. The focus of

the Baltic Forest Project was enhancement of regional development based on sustainable use of forests and elevated forest sector cooperation. Eight Baltic Sea region countries were involved. Among the main conclusions of the project were that:

- The Model Forest concept would add to the overall capacity in landscape-level sustainability
- Some countries notably, Sweden, Poland and Finland already have available infrastructures that allow for a scaling up and establishment of a network of landscape case studies in connection with the IMFN
- The Baltic Forest Project resulted in strengthened cooperation with Northwest Russia as a natural regional extension

### **Milestones**

| 1994 | Gassinski Model Forest established in Russia   |
|------|--|
| 2004 | Vilhelmina Model Forest established in Sweden  |
| 2005 | Kovdozersky Model Forest established in Russia   |
| 2006 | Two Model Forests in Russia join the IMFN: Komi and Pskov<br>Baltic Forest Project begins                              |
| 2007 | Agreement between the Russian Model Forests to develop a national Model Forest<br>Network                              |
| 2008 | Bergslagen, Sweden to develop a Model Forest   |
| 2010 | Gassinski Model Forest closes  |
| 2011 | Development of the Baltic Landscape Initiative between Sweden, Finland, Poland, Belarus and Northwest Russia initiated |

## **Looking Forward**

Based on the success of the Baltic Forest Project and parallel activities to explore landscape-level approaches to sustainability, plans are underway for a new regional project on Model Forest development and networking in Sweden, Finland, Poland, Belarus and Northwest Russia. In this proposed "Baltic Landscape Project" there is a stronger focus on creating new case studies to be connected with the IMFN and creating a long-term foundation for a regional network. The project's core idea is to implement, evaluate and define Model Forest principles in the context of the current needs and premises concerning sustainable use and governance of landscapes in northern Europe.



Gassinski Model Forest, Russia

### Activities Undertaken in the Komi Model Forest

The Komi Model Forest is located at the western base of the Ural Mountains in Russia. Here the taiga forest landscape covers 89 % of Komi Republic (417 000 square kilometres). Because industrial logging began only 80 years ago, the landscape is relatively untouched. This pristine landscape is rich in biodiversity and therefore has a high conservation value. At the same time, the taiga forest still provides the base for local wood industries and is used for many traditional purposes by local villagers. Tension among forest stakeholders had arisen because of differences in opinion over conservation and economic needs. The Model Forest concept was seen as a viable approach to improve the management of oldgrowth forests that were endangered by unsustainable forest practices, and to resolve conflicts between forest industry workers and traditional forest users.

The Komi Model Forest has successfully implemented a wide arrange of activities since its inception, including:

• Undertaking an inventory of old-growth forests in Komi Republic and the development of management strategies to protect biodiversity

- Acting as a pilot site for Forest Stewardship Council (FSC) certification in Komi Republic, developing a regional FSC standard, and encouraging others to become FSC-certified (2.2 million hectares of the republic are now FSC certified). The Model Forest experience was also vital for FSC certification of an IKEA project in the neighbouring region (100 000 hectares)
- Developing procedures to involve local stakeholders in sustainable forest management and decision-making; the experience of local involvement in forest management has been disseminated in two other regions of Komi Republic
- Testing innovative methods to adapt forest practices to sustainable management requirements, the recommendations of which were adopted by the State Forest Service
- Developing and implementing training and extension courses to disseminate knowledge and experience beyond the Model Forest; courses have been offered to approximately 1 200 people from the State Forest Service, the forest industry, teachers and non-government organizations
- Developing recommendations for Komi Republic officials and decision-makers to introduce and legally adopt sustainable forest management practices

## Climate Change Activities in the Vilhelmina Model Forest

In the Vilhelmina Model Forest, most of the information on changes in weather patterns and climate comes from interviews with local elders and reindeer herders, most of whom suggest that the winter season is changing – notably, with warmer and shorter winters now occurring and changes to snow types and cover. For example, elders have observed that rivers and lakes freeze later, if at all. In addition, warmer summers have made reindeer herders particularly vulnerable to rain-onsnow events and to rapid shifts in temperature, which may act to prevent access to winter grazing areas. Some herders argue that such events have increased in frequency.

Reindeer herding communities in the region already express fear of changing weather patterns, and many practices have had to be abandoned. For example, many traditional migration routes over water are now inaccessible because of unsafe conditions. Most herders are also restricted in their ability to adapt because of financial constraints and partly because of land rights issues, such as access to grazing lands.

The Model Forest has been involved in capacity-building activities and awareness raising about climate change and its potential effects. Reindeer herders have changed some of their practices and are using technology for help, such as putting GPS-collars on the reindeer to more efficiently monitor herd location. Another measure being used increasingly is supplementary feeding of reindeer during the winter season in order to reduce the degradation of winter forage areas.

Model Forest partners have also launched several research and best-practice-oriented projects. An example is the widespread use of experimental plots and demonstration areas in the forestry sector. In the forestry–reindeer husbandry interface, the Model Forest is involved in developing and assessing a planning tool called Renbruksplaner, aimed at increasing collaboration between stakeholder groups and at ensuring greater use of climate-sensitive planning measures.

Sami Reindeer herders in Vilhelmina Model Forest, Sweden



# Section IV **Conclusions**

# The Way Forward: The IMFN Looks Towards the Coming Years

The IMFN, nearly 20 years after its establishment, has pioneered and developed a successful, flexible and accessible approach to landscapescale sustainability – an approach that is based on the inclusive and meaningful engagement of stakeholders. As well, the IMFN has linked Model Forests regionally and globally, stimulating important collaboration and innovation that supports a broad range of sustainability objectives. These are major accomplishments. We know that Model Forests are processes, not projects. The great majority of Model Forests established over the years remain active processes that are contributing to their stakeholders and communities.

In many parts of the world, the practice of management and planning at a landscape scale and with broad-based partnerships is not yet well entrenched. Model Forests and similarly mandated initiatives must therefore continue to illustrate, in concrete terms, the value of such approaches.

The way forward, we know, will present as many new and daunting challenges as those we have already faced. Population growth and increases in

We now have the time, with Rio+20, to reflect on the work done and - even more exciting - to look to the future and how we can work together to even greater effect in the coming years.

personal wealth, for example, will mean greater urbanization, a more aggressive search for raw materials to produce more products for consumers, and more pressure to convert forested land for agricultural purposes. At the same time, we



Members of the IMFN at a side event at the ninth session of the United Nations Forum on Forests, January 2011

will continue to be challenged to understand and anticipate the effects of climate change on our landscapes.

More than ever, then, we need to be openly and continually seeking fresh ways to solve problem - ways that speak to the unique challenges and opportunities found across all landscapes, and that allow us to draw upon the strength, ideas and skills of our communities. In this pursuit, we must also take the opportunity to convey the valuable lessons being learned by Model Forests to national levels so that those lessons ultimately find expression in national policy frameworks.

The work and dedication of the members of the IMFN have been outstanding, as the preceding pages demonstrate. An idea that started in 1992 with 10 Canadian Model Forests has grown to be a global learning network of over 55 Model Forests on five continents, involving thousands of partner organizations across enormously varied landscapes and jurisdictions. The strengths and significance of the Model Forest process is that it builds working partnerships among those who typically do not work together, it creates focused alliances for collaboration, and it addresses issues that are relevant to stakeholders and communities in tangible ways.

The IMFN remains committed to improving what we do and to sharing what we learn, both throughout the Network and with the many organizations we know that are undertaking equally important work in sustainable resource management.

We now have the time, with Rio+20, to reflect on the work done and – even more exciting – to look to the future and how we can work together to even greater effect in the coming years.

# Appendix A **Model Forest Activities Chart**

| 52 |  |
|----|--|

|   |                         |  |           |                |   | Model F               | Model Forest Activities             | ivities                                     |                    |                                  |  |                               |                             |
|---|-------------------------|--|-----------|----------------|---|-----------------------|-------------------------------------|---|--------------------|----------------------------------|--|-------------------------------|-----------------------------|
| IMFN Region,<br>Country and<br>Model Forest | Vear MF joined the IMFN | & noibsviersity Conservation & Stewardship | Віоепетду | Olimate Change | Community Sustainability/<br>Economic Development | Criteria & Indicators | Eco-cultural Tourism<br>Development | Ecological Processes / Natural Disturbances | Ecosystem Services | Education & Capacity<br>Building | e'elgenous People's<br>Involvement & Partnership | Non-Timber Forest<br>Products | Women & Youth<br>Engagement |
| AFRICA                                      |                         |  |           |                |   |                       |                                     |   |                    |                                  |  |                               |                             |
| Cameroon                                    |                         |  |           |                |   |                       |                                     |   |                    |                                  |  |                               |                             |
| Campo Ma'an                                 | 2005                    | •  |           | •              | •   |                       |                                     |   | •                  | •                                | •  | •                             | •                           |
| Dja et Mpomo                                | 2005                    |  |           |                | •   | •                     | •                                   |   |                    | •                                | •  | •                             |                             |
| ASIA  | ı                       | ı  | ı         | ı              | ı   | ı                     | ı                                   | ı   | ı                  | ı                                | ı  | ı                             | ı                           |
|   | 0007                    | ľ  |           | ŀ              |   |                       |                                     | ŀ   |                    |                                  |  |                               |                             |
| Total                                       | 888                     | •  | •         | •              |   | •                     | •                                   | •   | •                  | •                                |  | •                             |                             |
| lane – candidate                            |                         |  |           |                |   |                       |                                     |   |                    |                                  |  |                               |                             |
| Kodaga                                      | 2005                    | •  |           |                | •   |                       | •                                   |   | •                  | •                                | •  | •                             |                             |
| אסטיים                                      | 2007                    | •  |           |                | •   |                       | •                                   |   | •                  | •                                | ,  | •                             |                             |
| Margowitan                                  | 2004                    |  | •         |                | •   |                       |                                     |   | •                  | •                                |  | •                             |                             |
| Japan                                       |                         |  |           | -              |   |                       |                                     |   |                    |                                  |  |                               |                             |
| Kyoto                                       | 2011                    |  |           |                |   |                       |                                     |   |                    |                                  |  |                               |                             |
| Philippines                                 |                         |  |           |                |   |                       |                                     |   |                    |                                  |  |                               |                             |
| Carood Watershed                            | 2010                    |  |           |                | •   |                       |                                     |   |                    | •                                |  |                               |                             |
| Ulot Watershed                              | 2000                    | •  |           | •              | •   | •                     | •                                   | •   | •                  | •                                |  | •                             | •                           |
| Thailand                                    |                         |  |           |                |   |                       |                                     |   |                    |                                  |  |                               |                             |
| Ngao  | 2000                    | •  | •         | •              | •   | •                     | •                                   | I   | •                  | •                                | •  | •                             | •                           |
| Canada                                      | ı                       | ı  | ı         | ı              | ı   | ı                     | ı                                   | ı   | ı                  | ı                                | ı  | ı                             |                             |
| Clayquot Forest Communities                 | 2008                    | •  | •         |                | •   | •                     | •                                   | •   | •                  | •                                | •  | •                             | •                           |
| Cree Research and Development Institute     | 1997                    |  |           |                |   | •                     |                                     |   |                    |                                  |  |                               |                             |
| Eastern Ontario                             | 1992                    | •  | •         |                | •   | •                     |                                     | •   | •                  | •                                | •  | •                             | •                           |
| Foothills Research Institute                | 1992                    | •  |           | •              | •   | •                     | •                                   | •   |                    | •                                | •  |                               |                             |
| Fundy                                       | 1992                    |  | •         | •              | •   | •                     |                                     | •   | •                  | •                                |  | •                             |                             |
| Lac-Saint-Jean                              | 2007                    | •  | •         | •              | •   | •                     | •                                   | •   |                    | •                                | •  | •                             | •                           |
| Lake Abitibi                                | 1992                    |  | •         | •              | •   | •                     |                                     | •   |                    | •                                | •  | •                             |                             |
| Le Bourdon Project                          | 2007                    |  |           |                |   | •                     |                                     |   |                    |                                  | •  |                               |                             |
| Manitoba                                    | 1992                    | •  |           | •              |   | •                     |                                     | •   |                    | •                                | •  | •                             |                             |
| Newfoundland and Labrador                   | 1992                    | •  | •         | •              | •   | •                     | •                                   | •   | •                  | •                                | •  | •                             | •                           |
| Northeast Superior Forest Community         | 2007                    | •  | •         |                | •   | •                     | •                                   |   |                    | •                                | •  | •                             | •                           |
| Nova Forest Alliance                        | 1998                    | •  | •         | •              | •   | •                     | •                                   | •   | •                  | •                                | •  |                               |                             |
| Prince Albert                               | 1992                    | •  | •         | •              | •   | •                     | •                                   | •   | •                  | •                                | •  | •                             |                             |
| Resources North Association                 | 1992                    | •  | •         | •              | •   | •                     |                                     |   |                    | •                                | •  | •                             | •                           |
| Weberville Community                        | 2010                    |  |           |                |   |                       |                                     |   |                    |                                  |  |                               |                             |

|   |                         |   |           |                |  | Model F               | Model Forest Activities             | ivities  |                    |                               |  |                               |                             |
|---|-------------------------|---|-----------|----------------|--|-----------------------|-------------------------------------|--|--------------------|-------------------------------|--|-------------------------------|-----------------------------|
| IMFN Region,<br>Country and<br>Model Forest | Year MF joined the IMFN | Biodiversity Conservation & Stewardship | Bioenergy | Slimate Change | Community Sustainability/ Economic Development | Criferia & Indicators | Eco-cultural Touriam<br>Development | Ecological Processes /<br>Natural Disturbances | Ecosystem Services | Education & Capacity Building | lndigenous People's<br>Involvement & Partnership | Non-Timber Forest<br>Products | Women & Youth<br>Engagement |
| IBERO-AMERICA                               | ı                       |   |           |                |  |                       |                                     |  |                    |                               |  |                               |                             |
| Argentina                                   | 0000                    | •                                       |           |                | •  | •                     |                                     |  |                    |                               |  |                               |                             |
| rormoseno                                   | 7000                    | •                                       |           |                | •  | •                     |                                     |  |                    |                               |  |                               |                             |
| Futaleufú                                   | 1998                    | •                                       |           |                | •  | •                     | •                                   |  |                    | •                             |  | •                             |                             |
| Kninc                                       | 2002                    | •                                       |           |                | •  | •                     |                                     |  |                    | •                             |  |                               |                             |
| Norte de Neuquén                            | 2005                    |   |           |                | •  | •                     |                                     |  |                    |                               | •  |                               |                             |
| San Pedro                                   | 2007                    |   | •         |                |  | •                     | •                                   |  | •                  | •                             |  |                               |                             |
| Tucuman                                     | 2008                    |   |           |                |  | •                     |                                     |  |                    |                               |  |                               |                             |
| Bolivia                                     |                         |   |           |                |  |                       |                                     |  |                    |                               |  |                               |                             |
| Chiquitano                                  | 2002                    | •                                       | •         | •              | •  | 1                     | •                                   | •  |                    | •                             | •  | •                             | •                           |
| Brazil                                      |                         |   |           |                |  |                       |                                     |  |                    |                               |  |                               |                             |
| Mata Atlántica                              | 2004                    |   |           |                | •  |                       |                                     |  |                    |                               |  |                               |                             |
| Pandeiros                                   | 2002                    | •                                       | •         | •              | •  |                       | •                                   |  |                    | •                             | •  | •                             |                             |
| Chile                                       |                         |   | -         | -              | -  | -                     | -                                   |  |                    |                               | -  | -                             |                             |
| Araucarias del Alto Malleco                 | 2002                    | •                                       | •         |                | •  |                       | •                                   |  |                    | •                             | •  | •                             |                             |
| Cachapoal                                   | 2002                    | •                                       | •         | •              | •  |                       | •                                   |  | •                  | •                             | •  | •                             | •                           |
| Chiloé                                      | 1998                    |   |           |                | •  |                       | •                                   |  |                    | •                             |  |                               |                             |
| Panguipulli                                 | 2002                    | •                                       |           |                | •  |                       | •                                   |  |                    |                               | •  | •                             |                             |
| Costa Rica                                  |                         |   |           |                | -  |                       | -                                   | -  | -                  | -                             | -  |                               |                             |
| Chorotega                                   | 2011                    |   |           |                |  |                       |                                     |  |                    |                               |  |                               |                             |
| Reventazón                                  | 2003                    | •                                       |           | •              | •  |                       | •                                   |  | •                  | •                             | •  | •                             | •                           |
| Colombia                                    |                         |   |           |                | -  |                       | -                                   | -  |                    |                               | -  |                               |                             |
| Risaralda                                   | 2008                    | •                                       | •         | •              | •  | •                     | •                                   |  | •                  | •                             | •  | •                             |                             |
| Cuba  |                         |   | -         | -              |  | -                     |                                     |  |                    |                               |  | -                             |                             |
| Sabanas de Manacas                          | 2008                    | •                                       | •         | 1              | •  | 1                     |                                     | •  | •                  | •                             |  | 1                             |                             |
| Dominican Republic                          |                         |   | -         |                | -  | -                     | -                                   |  |                    | -                             | -  | -                             |                             |
| Colinas Bajas                               | 2010                    |   |           |                |  |                       |                                     |  |                    |                               |  |                               |                             |
| Sabana Yegua                                | 2003                    |   |           |                | •  |                       |                                     |  | •                  | •                             |  |                               |                             |
| Yaque del Norte                             | 2007                    | •                                       |           |                | •  |                       | •                                   | •  | •                  |                               |  |                               |                             |
| Guatemala                                   |                         |   | -         | -              | -  | -                     | -                                   |  |                    |                               | -  | -                             |                             |
| Lachuá                                      | 2008                    | •                                       |           | •              | •  |                       | •                                   |  | •                  | •                             | •  | •                             | •                           |
| Los Altos                                   | 2008                    | •                                       |           | •              | •  |                       | •                                   |  |                    | •                             | •  |                               | •                           |
| Honduras                                    |                         |   |           |                |  |                       |                                     |  | ·                  |                               |  |                               |                             |
| Atlá  | 2006                    | •                                       |           |                |  |                       | •                                   |  | •                  |                               |  | •                             |                             |
| Yoro  | 2007                    | •                                       |           |                | •  |                       |                                     |  | •                  |                               |  |                               |                             |
| Puerto Rico                                 |                         |   |           |                |  |                       |                                     |  |                    |                               |  |                               |                             |
| Tierras Adjuntas                            | 2007                    | •                                       |           | •              | •  |                       | •                                   | •  | •                  | •                             |  | •                             |                             |

|   |                         |   |           |                |   | Model F               | Model Forest Activities             | ivities  |                    |                                  |  |                               |                             |
|---|-------------------------|---|-----------|----------------|---|-----------------------|-------------------------------------|--|--------------------|----------------------------------|--|-------------------------------|-----------------------------|
| IMFN Region,<br>Country and<br>Model Forest | Year MF joined the IMFN | Biodiversity Conservation & Stewardship | Віоепегду | Olimate Change | Community Sustainability/<br>Economic Development | Criteria & Indicatora | Eco-cultural Tourism<br>Development | Ecological Processes /<br>Natural Disturbances | Ecosystem Services | Education & Capacity<br>Building | Indigenous People's<br>Involvement & Partnership | Non-Timber Forest<br>Products | Women & Youth<br>Engagement |
| MEDITERRANEAN                               |                         |   |           |                |   |                       |                                     |  |                    |                                  |  |                               |                             |
| Morocco                                     |                         |   |           |                |   |                       |                                     |  |                    |                                  |  |                               |                             |
| Ifrane – candidate                          |                         |   |           |                |   |                       |                                     |  |                    |                                  |  |                               |                             |
| Spain                                       |                         |   |           |                |   |                       |                                     |  |                    |                                  |  |                               |                             |
| Urbión                                      | 2006                    | •                                       |           | •              | •   |                       | •                                   | •  |                    |                                  |  | •                             |                             |
| Turkey                                      |                         |   |           |                |   |                       |                                     |  |                    |                                  |  |                               |                             |
| Yalova – candidate                          |                         |   |           |                |   |                       |                                     |  |                    |                                  |  |                               |                             |
| RUSSIA & NORTHERN EUROPE                    |                         |   |           |                |   |                       |                                     |  |                    |                                  |  |                               |                             |
| Russia                                      |                         |   |           |                |   |                       |                                     |  |                    |                                  |  |                               |                             |
| Komi  | 2006                    | •                                       |           |                | •   |                       |                                     | •  |                    |                                  | •  | •                             |                             |
| Kovdozersky                                 | 2005                    | •                                       | •         |                |   |                       | •                                   |  |                    |                                  |  | •                             | •                           |
| Pskov                                       | 2006                    |   |           |                |   |                       |                                     |  |                    | •                                |  |                               |                             |
| Sweden                                      |                         |   |           |                |   |                       |                                     |  |                    |                                  |  |                               |                             |
| Bergslagen – candidate                      |                         | •                                       | •         | •              | •   | •                     | •                                   | •  | •                  | •                                | •  | •                             | •                           |
| Vilhelmina                                  | 2004                    | •                                       | •         | •              | •   | •                     | •                                   | •  | •                  | •                                | •  | •                             | •                           |

# **Regional Model Forest Networks**

#### African Model Forest Network

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www.africanmodelforests.org

#### Canadian Model Forest Network

P.O. Bag 2150 10 Campus Drive

Kemptville, Ontario Canada KOG 1JC

www modelforest ne

#### Ibero-American Regional Model Forest Network

División de Investigación y Desarroll CATIE 7170, Turrialba, Costa Rica

#### Mediterranean Model Forest Network

Plaza de la Universidad Numero 4 - Entreplanta 47002 Valladolid Spain

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### Regional Model Forest Network — Asia

Chinese Academy of Forest Wan Shou Shan P.O. Box 3 Beijing 100091

### Russia

### c/o Komi Model Forest

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### Northern Europe c/o Vilhelmina Model Forest

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