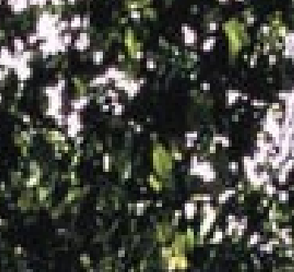
WWF

for a living planet®

HIGH CONSERVATION VALUE FORESTS:

The concept in theory and practice



CONTENTS

High Conservation Value Forests: The concept in theory and practice

This brochure will interest anyone seeking solutions for forest use that look at not only the economic value of forests but also the critical social and ecosystem values and services which forests provide to people and nature. Readers will be able to learn about the concept of **High Conservation Value Forests (HCVFs)** and how it has been applied throughout the world. They will also be able to see how the concept has been used in many different settings and by a wide range of stakeholder groups, including:

government policy-makers involved in conservation, forestry and landscape planning;

forest managers and owners interested in responsible forest management and certification;

investors and donors concerned with reducing the social and environmental risks of their support to forest sector projects; and

organisations working in conservation and sustainable development.

The brochure also includes a brief discussion of how the HCVF concept and its uses may develop in the future.

In the last five years, the HCVF concept has been picked up by many groups around the world and used in many different applications. This rapid expansion has been accompanied by exciting innovations but has also brought challenges in maintaining consistency in how the concept has been used and clarity in how it has been understood. It has also made it difficult to keep track of all the innovation and experimentation going on.

The aim of this brochure is therefore to clarify the concept, show its strengths and limitations, illustrate how it has been applied throughout the world, and look forward to how the concept may evolve in the future. Readers can obtain more information on HCVFs from the HCV Resource Network, www.hcvnetwork.org (see page 22).

Introduction

Each year 13 million hectares of the world's forests are lost to deforestation. This loss is having a devastating effect on biodiversity – FAO estimates that deforestation in the tropics could account for the loss of up to 100 species a day. Local communities also bear the cost of deforestation, as 1.6 billion people worldwide rely on forests for their basic necessities such as food, water, fuel and medicines. The impacts go even further as deforestation accounts for up to 25 percent of the global greenhouse gas emissions that contribute to global warming.

Set against this forest loss is a complex, conflicted world. Many of the most forest-rich countries are also among the world's poorest and their governments face competing priorities of poverty alleviation, conservation and economic development. Forests can support all three priorities but not without trade-offs. Forest conservation is crucial but so also is forest use such as logging, as it brings much-needed jobs and income to millions of poor people throughout the world. Conservation and production need to go hand-in-hand, and there is good evidence that this is happening. Timber companies are becoming increasingly aware of the need for sustainable management and are looking for guidance on how to do this.

The concept of High Conservation Value Forests (HCVFs) was developed with this in mind – to provide a framework for identifying forest areas with special attributes that make them particularly valuable for biodiversity and/or local people. The aim of applying this framework is to design and implement appropriate management options for these areas in order to preserve or enhance their key ecological and socio-economic values.

The HCVF concept was first introduced by the Forest Stewardship Council (FSC) in 1999 when it included HCVFs in one of its requirements for timber companies seeking forest certification. According to Principle 9 of FSC, **"Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach."**

What makes a Forest a High Conservation Value Forest?

HCVFs are forests of outstanding and critical importance due to their high environmental, socio-economic, biodiversity or landscape values. HCVFs could therefore include, for example, slope forests in the European Alps protecting human settlements, the sacred burial grounds of a North American First Nation people, habitats of threatened orang-utans in Southeast Asia, or large landscape forests in Siberia.

WWF and HCVF

WWF has been actively supporting the development of the HCVF concept and has broadened its use beyond forest certification, to make it applicable in other contexts such as landscape planning and responsible purchasing and investment. WWF has helped develop a global toolkit on the use of the HCVF concept, as well as national, tailored versions of the toolkit in a wide range of countries. WWF has assisted many governments, companies, communities and other stakeholders to apply the HCVF concept in their forest management, land-use planning and conservation work.

Four key facts about the HCVF concept

It is **science-based** – providing a systematic framework for identifying high conservation values, based on the best-available ecological and social information. However, the ultimate decision as to whether the conservation values present are sufficiently concentrated or critical to be termed HCVs will always be a subjective one.

It is **stakeholder-based** – the HCVF concept is intended to involve a wide range of stakeholders in the identification and assessment processes, in order to benefit from a broad range of expertise and experience and to ensure that a range of interests are represented in making that subjective decision.

It can be applied to **all forest types** – boreal, temperate or tropical, natural or plantation, intact or fragmented, as HCVF designation relies solely on the presence of high conservation values.

It can be applied on **different scales** – an HCVF may be a small part of a larger forest, or a whole forest management area. Likewise, HCVF assessments can be done on a small (site-level) scale or large (landscape, national level) scale.

The Precautionary Principle

A key element of the HCVF concept is the application of the Precautionary Principle in forest management. In practice this means that if a value might exist, management must assume that it does, and that if an activity might be damaging to a value, management must assume that it is. Adopting this principle ensures that the high conservation values are maintained or enhanced, particularly when the effects of the activities or the status of the values are not fully known.

Logging HCVFs – a taboo?

There has been some debate about whether HCVFs should be declared 'no-go' zones for logging or whether they can be subject to controlled logging. The concept was originally developed within a sustainable forest management approach (i.e. FSC certification) and was never intended to preclude all forms of logging in all cases. Rather, it is designed as a tool to enable forest managers to develop conservation-based management plans. The key is to base all management decisions on the preservation or enhancement of the high conservation values identified, and to use the Precautionary Principle when in doubt. In some cases this may mean formal protection of the HCVFs, in other cases it may mean deferred logging, and in still other cases sustainable extraction methods may be appropriate. Carefully logged areas can still contribute to conservation by, for example, providing wildlife corridors between protected areas.

What are HCVFs?

High Conservation Value Forests are defined as the forest areas required to maintain or enhance the High Conservation Values (HCVs) that have been identified. There are six categories of HCVs (see below), covering both ecological and social values. A full HCVF assessment would need to cover all six values. Sometimes it has proved useful to undertake partial assessments focusing, for example, on just the ecological or social values. However, these cases are not considered full HCVF assessments.

The six types of High Conservation Value

HCV**1** **Globally, regionally or nationally significant concentrations of biodiversity values.**
For example, the presence of several globally threatened bird species within a Kenyan montane forest.

HCV**2** **Globally, regionally or nationally significant large landscape-level forests.**
For example, a large tract of Mesoamerican lowland rainforest with healthy populations of jaguars, tapirs, harpy eagles and caiman as well as most smaller species.

HCV**3** **Forest areas that are in or contain rare, threatened or endangered ecosystems.**
For example, patches of a regionally rare type of freshwater swamp forest in an Australian coastal district.

HCV**4** **Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).**
For example, forest on steep slopes with avalanche risk above a town in the European Alps.

HCV**5** **Forest areas fundamental to meeting the basic needs of local communities.**
For example, key hunting or foraging areas for communities living at subsistence level in a Cambodian lowland forest mosaic.

HCV**6** **Forest areas critical to local communities' traditional cultural identity.**
For example, sacred burial grounds within a forest management area in Canada.

Why use the HCVF concept?

The HCVF concept offers a framework that is useful to many different groups in both the public and private sectors, including forest managers, land owners, landscape planners, forest product purchasers and certifiers, and investors and donors. The figure opposite shows something of the range of uses and users of the HCVF concept.

Key strengths of the HCVF concept

- It moves away from polarised debates of "cut or don't cut" to informed discussions of how to maintain or enhance the special attributes (values) of forests.
- It is flexible and not prescriptive – it doesn't give predetermined requirements on how to manage HCVFs.
- It takes account of local people's aspirations and needs.
- Its application can make use of data already collected and can be used in combination with other tools.

HCVF: benefiting people and nature

The HCVF concept is concerned with the values and services which forests provide to people and nature. Applications of the concept can therefore address social, economic and environmental issues, such as:

conservation of an area's most valuable species, ecosystems and landscapes;

protection of people against floods, avalanches and soil erosion;

conservation of natural resources of importance to local communities;

valuation of non-timber forest products and environmental services; or

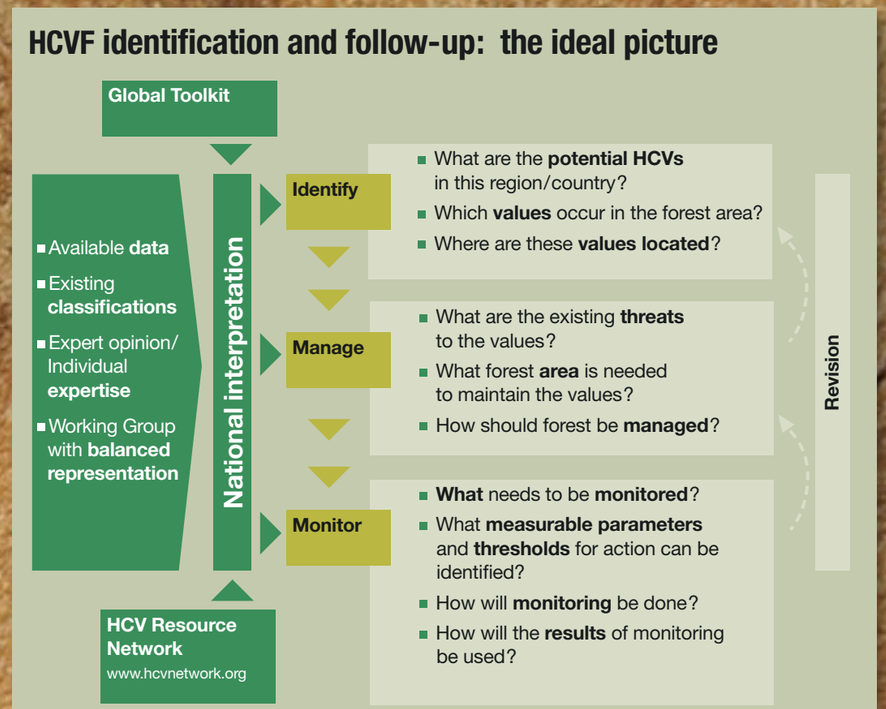
conservation of an area's most valuable cultural heritage and identity.

It is important to stress, however, that the HCVF concept has its own limitations. By itself, it cannot guarantee the conservation of these valuable forests. In the end, decisions on HCVF management come down to financial and/or political priorities, and while the assessments and consultations of HCVF work can inform this process, they will not have the final say. The flexibility of the concept, one of its key strengths, is also a potential drawback as it can leave it open to widely different interpretations of the purpose and results of HCVF assessments. For example, WWF has advocated use of the HCVF concept in "frontier" landscapes to guide government and company decisions over which forests are maintained and which are converted to timber or agricultural plantations. Some groups might see this use of the HCVF concept as simply a means to justify conversion of natural forest. Others may take the opposing view and regard this use of the concept as a block on development in forest areas already zoned for plantation development. In WWF's view, the HCVF concept, properly applied, provides relatively neutral and transparent input to the political processes that determine the land-use mosaic in a given place.

The HCVF concept can assist governments in balancing decisions on forest use and conservation, collecting information as a basis for policy formulation and resource allocation, and implementing international conventions and agreements such as the Convention on Biological Diversity (CBD) and the United Nations Forum on Forests (UNFF).

Applying the HCVF concept

Examples of uses		*Examples of users*
Forest management	FSC certification Sustainable forest management	Forest managers of private and public lands
Landscape planning	Plantation design	Pulp and paper, palm oil and soy companies, etc
	Land-use planning	Governments, forest owners
Conservation planning	Protected area planning Targeted conservation planning	Governments, conservation organizations
Policy commitments	Responsible purchasing	Business and industry
	Investment and donor policies	Financial institutions and funding bodies
Conservation advocacy	Lobbying Market campaigns	NGOs and local communities



How has the HCVF concept been applied?

The HCVF concept has been applied in many different ways in a huge range of forest types across the globe. In some countries, such as Canada, Romania, Bulgaria and Indonesia, the concept has been introduced at a national level, with the establishment of multi-stakeholder working groups to develop national interpretations of the global HCVF toolkit. In general, these initial processes have helped ensure consistent quality, transparency and stakeholder participation in the subsequent HCVF work in these countries. This is not to say that HCVF work can only start after national guidelines have been produced. As a number of the country cases will illustrate, HCVF work has often started at the local level through individual conservation initiatives, in the absence of any national process. Here, the HCVF practitioners have had to improvise and have often made valuable innovations and pushed the scope of HCVF applications in new directions.

The figure opposite shows an 'ideal' picture of how the HCVF concept can be introduced at a national level and applied for the identification, management and monitoring of a country's or region's HCVFs.

It should be borne in mind that the process illustrated here does not cover all the possible applications of the HCVF concept. Other HCVF work has included, for example:

The use of HCVF principles to guide landscape planning and influence government policy on land-use planning. Examples: Russia, Indonesia, Turkey and Georgia.

The use of the HCVF concept to guide responsible purchasing policies and responsible investment in the forest sector. Examples: Japan, Indonesia.

The use of HCVF assessments to evaluate existing protected area networks. Examples: Estonia, Latvia and Lithuania.

The inclusion of the concept in sets of principles and criteria for natural resource management, to specify where conversion of HCVFs is prohibited. Examples: soy and palm oil industries.

This last use – on forest conversion – has focused on soy and palm oil. Two international multi-stakeholder initiatives, the Roundtable on Sustainable Palm Oil (RSPO) and the Roundtable on Responsible Soy (RTRS), are currently working to develop production standards for these two crops that would include the HCVF concept.

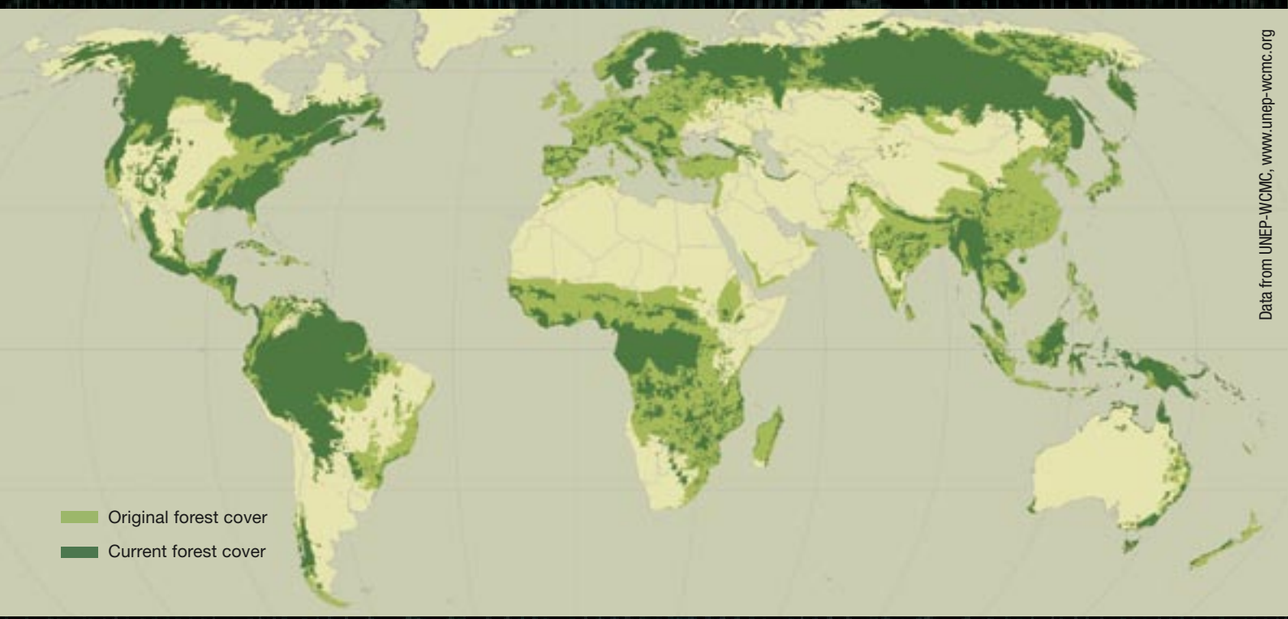
The World Bank/WWF Alliance for Forest Conservation and Sustainable Use, established in 1998, has actively supported the development of the HCVF concept and its applications around the world. During the last three years, it has supported, for instance, the use of the HCVF concept in China as part of the national forest certification standard-setting process, training for similar work in Mozambique, and priority HCVF activities in several Eastern European countries.

A toolkit for HCVFs

WWF and the home furnishings company IKEA have an ongoing partnership to help promote responsible forestry. As part of their collaboration, the two groups commissioned production of a toolkit on HCVFs to provide practical guidance on how the concept can be applied. The HCVF toolkit was produced in 2003, under the co-ordination of a natural resource management consulting firm, Proforest, and has since been translated into many languages including Russian, Chinese, French and Spanish. Tailored versions of the toolkit have been drafted for many countries including China, Indonesia, Vietnam, Laos, Papua New Guinea, Bulgaria, Romania, Canada, Nicaragua, Bolivia, Ecuador and Ghana. The toolkit provides guidance on how to define HCVFs and lists the kinds of questions that need to be asked when identifying the different types of HCVs present. It also advises on appropriate requirements for managing and monitoring each type of high conservation value. The global HCVF toolkit and the national versions have been instrumental in making the HCVF concept a reality in many countries. The toolkit can be downloaded from: www.panda.org/forests and many of the national interpretations of the toolkit are available from the HCV Resource Network, www.hcvnetwork.org.

HCVF in practice

CANADA
INDONESIA
RUSSIA
BULGARIA
ROMANIA
CHINA
COLOMBIA
BOLIVIA
MALAYSIA



Data from UNEP-WCMC, www.unep-wcmc.org

Map showing global distribution of original and remaining forests.

VIETNAM
PORTUGAL
JAPAN
GEORGIA
TURKEY
GHANA
ESTONIA
LATVIA
LITHUANIA
PAPUA NEW GUINEA

From Canada to Russia, and from Ghana to Indonesia, the HCVF concept has been applied in many ways around the world. Wood-based industries such as pulp and paper companies have adopted the concept within their responsible purchasing policies, while logging companies have used it to guide them on which forest areas they should avoid clearing or cutting. Government agencies too have adopted the concept, notably in land-use planning and forest management.

The following ten pages provide some highlights of on-the-ground work involving the HCVF concept in a number of different countries. These country examples by no means comprise an exhaustive account of how the HCVF concept has been applied. Instead, they have been selected here to show something of the diversity of HCVF applications.

CANADA

Companies lead the way

Canada has the largest area of FSC-certified forests in the world, with over 20 million hectares currently certified. It is within this FSC context that the HCVF concept has caught on fast in Canada, driven by the high level of interest among forest companies in achieving certification, since FSC's Principle 9 requires HCVFs to be managed in ways that ensure that their high conservation values are maintained or enhanced. These companies have therefore been the primary actors, commissioning the identification and assessment of HCVFs in Canada. To date, up to 20 HCVF reports have been written for forest tenures in Canada's commercial forest zone covering over 20 million hectares of public forestland. Each assessment has produced some innovations in applying the HCVF concept and the past five years have seen a steady improvement in the data analysis, investigation, delineation and description of management prescriptions for HCVFs.

WWF-Canada has played a key role in supporting these HCVF-related activities and recently collaborated with The Nature Conservancy (TNC) and other conservation partners to produce a support document on HCVFs, to help encourage consistency among the different applications. FSC-Canada has also supported consistency by producing a national standard for interpreting Principle 9 and guidelines for assessing HCVFs in the context of Canada's boreal forests.

Given the strong link between FSC certification and the application of the HCVF concept in Canada, most of the country's HCVF activities have centred around assessments of managed forests at the Forest Management Unit (FMU) scale, involving some of Canada's biggest timber companies.

Key challenges for HCVF work in Canada

- **It is not clear how many HCVF assessments have been followed up by the identification and implementation of appropriate management prescriptions – i.e. the HCVF reports have not always been translated into action on the ground.**
- **Practitioners in Canada continue to struggle with some aspects of HCVF applications, such as the threshold when a value becomes a "high conservation value" and what proportion of the distribution of a value is the most "critical and/or outstanding".**
- **Few of the HCVF assessments have seriously addressed the cultural or social values present in the forests.**

Filling the conservation gaps

Tembec Inc. manages over 15 million hectares of forest land in Canada and has committed to obtaining FSC certification for all forests under its care. By the end of 2006, about 8 million hectares had been certified with another 4 million hectares expecting certificates in the near future. Tembec has worked with WWF-Canada since 2001 to advance forest conservation and seeks to strengthen the existing protected area network within its forests by preserving options (i.e. deferring logging) and improving management methods in forest types currently under-represented by protected areas. Tembec and WWF-Canada undertook a joint HCVF assessment in 2002 in the Gordon Cosens Forest, northeastern Ontario. A team of resource managers and conservation scientists conducted ground and aerial field tours to identify and map high conservation values such as the habitats of pine marten and woodland caribou, and boreal white pine and intact landscapes. The team also conducted a gap analysis to pinpoint those key features of the forest that were missing from the existing protected areas. The results of the HCVF assessment and gap analysis were then combined to produce an agreed set of deferral options that would adequately complete representation. As a result of this work, Tembec was awarded FSC certification for the Gordon Cosens Forest in 2003 and succeeded in representing 60 percent of the forest in protected areas by deferring logging in an additional 140,000 hectares.

In Canada, the HCVF concept has caught on fast, driven largely by companies keen on achieving FSC certification.

Assessing an FMA with multiple tenures

Alberta-Pacific Forest Industries Inc. (Al-Pac) manages 5.8 million hectares of boreal mixed wood forest in northeastern Alberta, more than half of which consists of bogs, fens and other lands that do not produce commercial timber. In 2003, the company commissioned, jointly with WWF-Canada, an HCVF assessment of its entire Forest Management Agreement (FMA) area as a basis for seeking FSC certification. The assessment identified HCVs at the landscape, habitat and species levels, including large intact landscapes, old growth forests, habitat for woodland caribou, and rare species such as trumpeter swans and unique saline community associations. Given the large, diverse landscape of Al-Pac's FMA area, identifying high conservation values and management prescriptions deemed necessary to preserve or enhance those values proved challenging for both Al-Pac and conservation groups. The process was made more difficult by the complex tenure situation in the FMA area, with multiple tenures by different users on the resources (including a high level of oil and gas exploration). Those overlapping tenures meant that the management of some areas (and the preservation of some values) was beyond the control of Al-Pac. At the end of the process, Al-Pac successfully obtained FSC-certification for most of the FMA in September 2005, excluding a 300,000 hectare area of active oil sands development. Al-Pac's FMA area is currently the largest FSC-certified forest in the world.

INDONESIA

An urgent need for responsibly-managed plantations

Indonesia has some of the most biodiverse lowland rainforests in the world, but also the highest deforestation rate. Experts estimate that the country has lost about 50 percent of its rainforests. The HCVF concept has taken hold in Indonesia as a means of reconciling economic pressures to open up forest areas with the need to reduce the rate of forest loss. WWF-Indonesia has actively encouraged the use of the concept, integrating it within its ongoing work on conservation and sustainable forestry. The NGO has made a particular effort to raise awareness and seek strategic allies for the HCVF concept within government ministries and plantation companies. The urgent objective of HCVF work in Indonesia, as far as WWF is concerned, is to help pre-empt forest conversion and the biodiversity loss that accompanies it.

Much of the HCVF uptake in Indonesia is occurring outside FSC certification. Several of the largest pulp and paper companies are automatically disqualified from FSC certification because they engaged in the clearing of natural forest after 1994 – the cut-off year for FSC. It has been their desire for a more positive corporate image, and the emerging pressure from some international paper buyers who have adopted HCVF protection policies, that have motivated these companies to use the HCVF concept. In addition, the concept of HCVF is incorporated into the principles and criteria of the Roundtable on Sustainable Palm Oil. Indonesian palm oil producers are thus now developing methodologies to ensure protection of HCVFs in and around their plantations.

The Indonesian HCVF toolkit was the first national version to be produced, in 2003, and various arms of government are currently studying how HCVF can fit into existing government policies and planning processes. If this integration of HCVF into government policy goes ahead, it will help to align government land-use decisions with demands from international markets for 'HCVF-free' paper products and sustainably-produced palm oil.

To date, HCVF work in Indonesia has included a considerable number of HCVF assessments at the concession level by pulp, palm oil and timber companies, including more than a dozen in Sumatra and a handful in Kalimantan. Both WWF and The Nature Conservancy (TNC) have been working with companies to designate, manage and monitor HCVFs within their plantations and logging concessions. Several landscape-level HCVF assessments have also been undertaken in, for example:

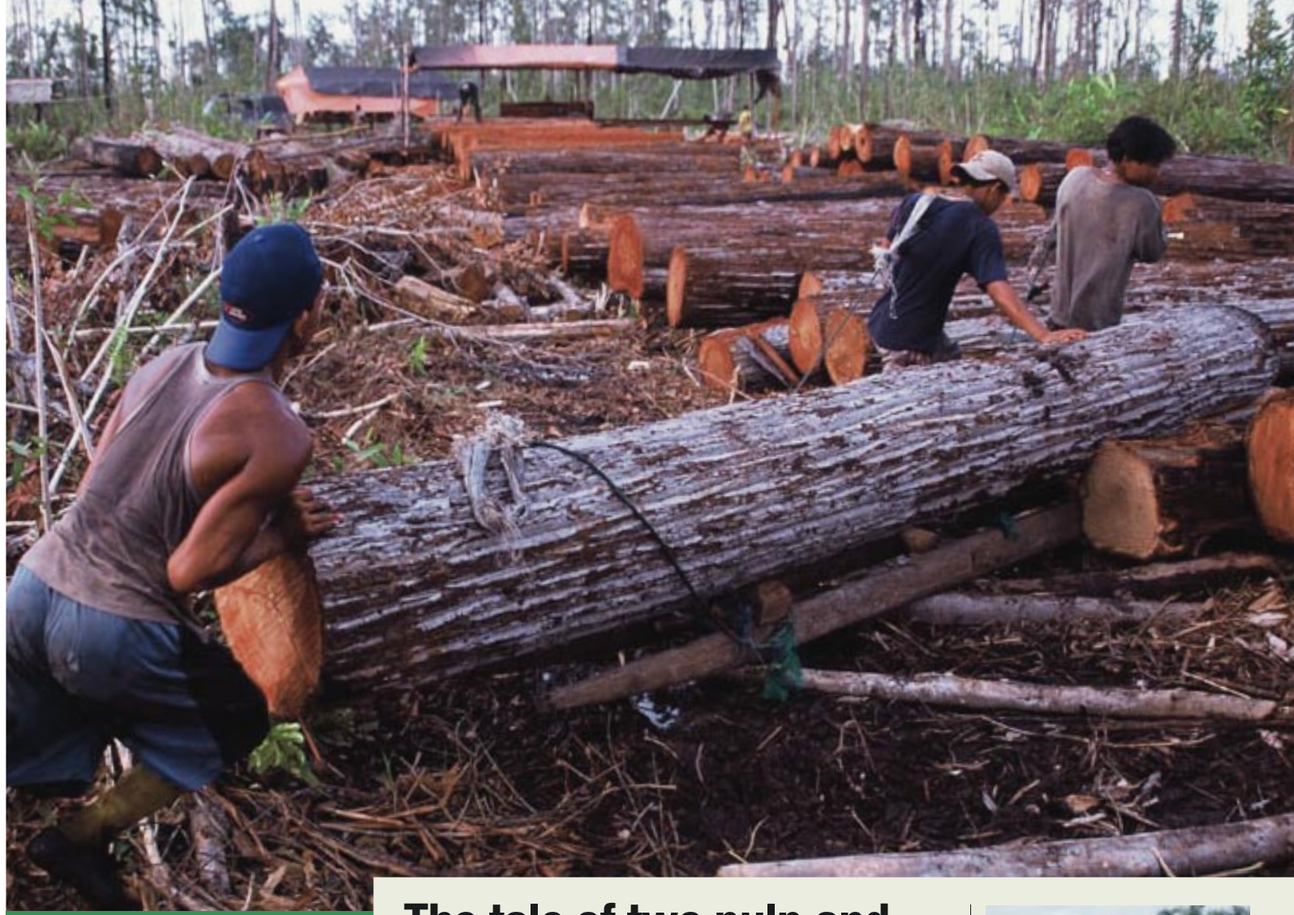
- **The Trans-fly region of southern New Guinea, where the HCVF assessment identified priority conservation areas for WWF's work there;**
- **Riau Province, Sumatra, where the coarse-scale HCVF assessment provided the basis for negotiations between WWF and land managers, and helped WWF in its campaign to secure the conservation of the few remaining large intact forest blocks such as the Tesso Nilo Forest complex; and**
- **West Kalimantan Province, Kalimantan, where HCVF assessments provided the arguments for WWF and other NGOs to sustain remaining forest areas and support the 'Heart of Borneo' conservation initiative.**

Buying an HCVF for orang-utans: an NGO-company partnership

The Nature Conservancy (TNC) identified a 20,000-hectare area within the Gunung Gajah logging concession in East Kalimantan as critical orang-utan habitat and an HCVF. In order to secure protection of this landscape, TNC formed a partnership with Sumalindo, a logging company which had already set aside a 50,000-hectare HCVF within one of its own concessions in East Kalimantan, for which it has recently gained FSC certification. TNC provided Sumalindo with the financing to buy the majority shares in Gunung Gajah and has agreed to reduce Sumalindo's debt if the company sets aside the 20,000 hectares as a conservation area.

Key challenges for HCVF work in Indonesia

- **The first version of the Indonesian HCVF toolkit was developed by a relatively small group of interested practitioners and experts. Since then, much experience in HCVF assessment has been gained and many more stakeholders have become involved. The challenge now is to involve a wider group of stakeholders in a process to strengthen the toolkit based on this experience.**
- **The results of HCVF assessments at the landscape and provincial levels need to be used to influence the Indonesian government's land-use and development planning – for instance, to gazette these areas in provincial and/or district spatial planning.**
- **Applications of the HCVF concept within the palm oil industry are limited to a few concessions. There may be a need to develop a tailor-made HCVF tool for palm oil companies, to expand their use of the concept.**



A major objective of the HCVF work in Indonesia is to help pre-empt forest conversion and biodiversity loss.

The tale of two pulp and paper companies

WWF commissioned several HCVF assessments in Riau Province, Sumatra, and has been urging pulp and paper companies APP and APRIL to protect the HCVFs in their concessions there.

In response, APP committed to protecting the HCVF found in one of its concessions and in 2005, commissioned Smartwood to map HCVFs in three of its other FMUs in the area. On the basis of this mapping, APP announced that it would protect the HCVFs identified and signed an agreement with Smartwood to track how well it is managing its HCVFs over the next five years. However, recent monitoring reports have shown that APP has failed to protect these areas from fires and illegal logging, despite its earlier pledges. This case highlights the need for active stewardship of HCVFs if company commitments are to make a real difference in practice.

For its part, APRIL conducted its own HCVF assessments in several of its FMUs, with support from local and international experts. APRIL also commissioned Proforest to conduct additional HCVF assessments. In July 2005 the company pledged it would not convert any HCVFs, as identified through application of the Indonesian toolkit, in any of its new concessions and would not source wood from HCVFs anywhere in the world for any of its mills. However, in April 2006, an investigation found that natural forest in a concession associated with APRIL was being logged, causing disturbance to elephant habitat. When notified of this, APRIL decided to halt logging in the area until more was known about the impacts of its operations on elephant habitat.

Palm oil companies sign on for HCVFs

Two of Indonesia's major palm oil producers, SMART and Astra Agro Lestari, have signed Memoranda of Understanding with WWF to undertake pilot HCVF assessments with WWF in some of their concessions. Both companies have agreed to implement the protection and management prescriptions identified in the HCVF work, and to apply the lessons learned in their other concessions throughout Indonesia.

RUSSIA

A regional approach in a vast country

Russia is home to one-fifth of the world's forests, including a great variety of ecosystems that harbour a high level of biodiversity. These forests, which provide much of the timber needs of Europe and China, are under pressure from the illegal and uncontrolled logging that thrives under widespread and institutionalized corruption. Forest certification has taken a dramatic leap in the last few years, with FSC certificates being awarded to about 30 companies that together account for over 10 million hectares of forest. However, the introduction of the HCVF concept in Russia took place before this surge in certification, catalysed by the work of the WWF and IKEA Co-operation on Forest Projects and the activities of other groups such as Greenpeace Russia on intact forest landscapes and old-growth forests. The stakeholder discussions on HCVFs have tended to take place at a regional rather than national level. This is in part a reflection of the fact that Russia has not had a national process of FSC standard-setting that could have been a vehicle for such a national dialogue on HCVFs. It is also more appropriate perhaps in such a huge and diverse country as Russia to hold HCVF dialogues on a regional basis.

The Arkhangelsk region of northwest Russia has been particularly active, with the regional HCVF working group developing their own interpretations of HCVF definitions and methodologies and their own regionally-specific toolkit. The Archangelsk HCVF group also drafted a new regional forest law for the designation and management of special protected forest plots, which has since been adopted by the regional administration.

In addition, two other regions have seen a good deal of action on HCVFs. The Komi Republic, also in northwest Russia, was the site of the country's first HCVF assessment and has perhaps advanced the HCVF concept furthest. HCVFs have been incorporated into legislation by the Komi administration and HCVF inventories have been carried out for over 5.5 million hectares of the region. The Primorsky region of the Russian Far East, for its part, has hosted a mapping of HCVFs by several national and international NGOs, that resulted in the identification of HCVFs in all the major forest types in the area.

One national-level HCVF activity has been the mapping of Russia's intact forest landscapes, also undertaken by numerous national and international NGOs, which has provided policy-makers with a clear picture of the country's most valuable forests.

Key challenges for HCVF work in Russia

- **Initially, the HCVF concept proved somewhat difficult for some stakeholder groups to understand, particularly government officials, and considerable efforts were needed to make it meaningful to them.**
- **Successful protection of HCVFs depends on the availability of good data – something that is lacking in many areas.**
- **Following the successful uptake of HCVF assessments, more work is now needed in developing methodologies for managing the HCVFs identified.**

The HCVF work in Russia has had far-reaching impacts, including the introduction of new low-impact logging techniques.

Pristine forests: rethinking their management

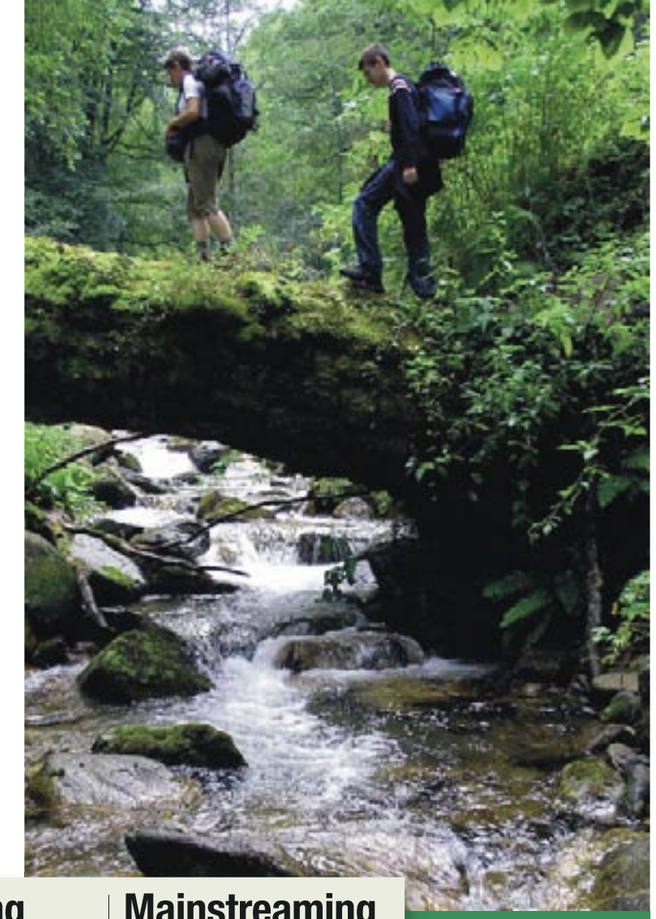
The 800,000-hectare Priluzye model forest in Russia's Komi Republic was established by the Swiss Agency for Development and Co-operation in 1996 to help spread the adoption of boreal forest conservation and sustainable management. Up until 2002, WWF was responsible for the implementation of this project and set out to use the HCVF concept to determine the most appropriate forest management practices. The HCVF team involved stakeholders from government agencies, forest companies, NGOs, local communities and academia to identify the area's HCVFs (or 'pristine forests' – a term used in Russia that equates closely to HCVFs). The team invented another category – 'HCVF massifs', to distinguish large tracts of HCVF (over 800 hectares) that should be formally protected. One such massif was found in the north of the model forest, in a concession operated by the Luzeles timber company. In response to this designation, the concessionaire showed real leadership by leaving this concession and moving to a new concession elsewhere. The other HCVFs were then classed by size and the larger ones assigned selective harvesting regimes (as opposed to the traditional clear felling techniques). However, clear felling was prescribed for the smaller, more fragmented or degraded HCVFs. This unusual approach, with clear felling of some HCVFs, is a reflection of the large areas of HCVFs that exist in Komi. In different circumstances, restoration of these HCVF fragments would be a more appropriate strategy. The HCVF work here had far-reaching impacts, as it resulted in a recalculation of the annual allowable cut, a reallocation of the concession areas, and the introduction of new low-impact logging techniques across much of the area. It also laid the groundwork for the FSC certification of the model forest in 2003 and the certification of two other forest units in Komi in 2006. The work continues today under the auspices of the Silver Taiga Foundation.

BULGARIA AND ROMANIA

Supporting the first certifications of public and private forests

Bulgaria and Romania have some of the most biodiverse temperate forests in the world, home to a significant part of Europe's large carnivore populations. However these forests have come under pressure from the two countries' transitions to market economies and land restitution policies that have left the forests open to market forces. Still now, there is little domestic demand for sustainably-sourced timber and certification has been rather slow to take off. Nonetheless, both governments have recently made important commitments to certifying their public forests. In 2005 the Romanian government committed to bring all state-owned forests under certification. Bulgaria followed suit in 2006, when it committed to certifying 30 percent of its public forests in the next five years. Certification of private forests has also begun in the last few years, as a result of efforts by the regional WWF programme.

The introduction of the HCVF concept in these countries, led by the WWF and IKEA Co-operation on Forest Projects, marks quite a departure from the narrow market-oriented perspective on forest values that has been prevalent in both countries. In each case it has been a long process, based on consultation and stakeholder dialogue involving the public and private sectors. National working groups were set up to adapt the HCVF toolkit to the local situation and field-test it in state- and community-owned forests. In 2005, the National Forest Administration of Romania used the national HCVF toolkit to finalize its first FSC certification, covering one million hectares of state-owned forests, and in the same year the Bulgarian HCVF toolkit was also used for the first FSC certifications in public and private forests. Since then, both national HCVF toolkits have been used extensively in a variety of applications.



Fine-tuning HCVF identification in Romania

The Romanian HCVF toolkit was field-tested in the Apuseni Mountains, in three different state forest districts. The testing revealed that some changes had to be done, including adjustments to the thresholds that trigger HCVF designation. In some test sites the originally-defined thresholds led to more than 60 percent of the total forest land being identified as HCVF. So, to keep the HCVF classification consistent with forests of outstanding and critical importance, the thresholds were raised. The Romanian HCVF toolkit will now be promoted for use at the national level in forest management practices.

Mainstreaming HCVF work in Bulgaria

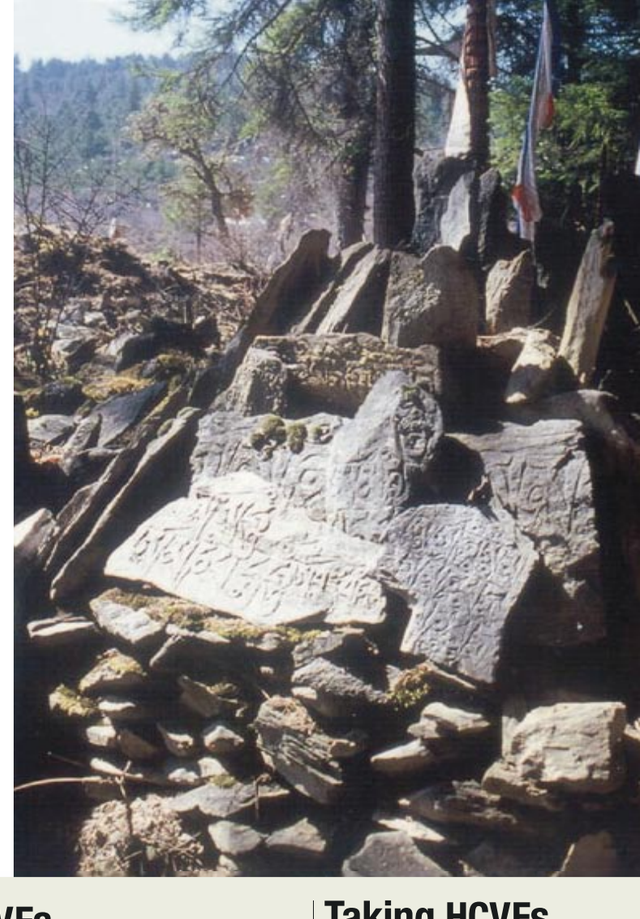
The government of Bulgaria has formally endorsed the national HCVF toolkit and adopted it as a methodology for biodiversity inventories. As such, the toolkit will be included in the national standards for forest management planning in Bulgaria. More valuable forests will benefit from its stipulations and will be managed in a responsible way. The toolkit is also being used by UNDP and a number of NGOs in Bulgaria for their biodiversity-related work and by the ten nature parks in the country.

Among the six categories of high conservation value is forest areas that provide basic services such as watershed protection.

CHINA

Moving into government policy

China is a dominant player in the global timber market and ranks second only to the US in the total value of its forest products imports. Now the leading importer of industrial round wood, China re-exports much of this, increasingly to sensitive markets with a strong demand for responsibly-harvested timber products. At the same time, China is searching for more sustainable ways of managing its own forest resources to help supply its important timber-processing industries. The government has introduced a wide array of protection measures to restore forest functions in over-exploited areas and has made a huge effort to designate "ecological forests". These drivers have helped motivate state-owned Forest Management Units to apply for forest certification and provided an opening for the introduction of the HCVF concept in 2002 by the WWF and IKEA Co-operation on Forest Projects. The series of HCVF assessments carried out in Northeast China and Inner Mongolia has provided technical support not only to the country's first FSC certifications but also to the integration of the HCVF concept in provincial and national forest management policies. These commitments are the result of a much greater awareness within the Chinese government about the need for sustainable use of forest resources and the desire to improve China's reputation as a consumer and exporter of timber products.



Identifying HCVFs in state forests

The WWF and IKEA Co-operation on Forest Projects selected two local forestry bureaus in Northeast China as pilot sites for implementing sustainable forest management techniques. This included the identification and assessment of HCVFs in the 420,000 hectares of forests managed by these two bureaus. This detailed work mapped out HCVFs as areas which should be set aside as nature reserves, areas where logging should be banned, and areas with important stands of Korean pine. It also led to these two forestry bureaus achieving the first FSC certification of state-owned forests in China. After their participation in this work, the two Provincial governments involved took the HCVF concept firmly on board. The Jilin Forestry Department has introduced HCVF identification into its five-year provincial forestry development plan and in Heilongjiang Province, the HCVF concept will be integrated into the provincial standard for identifying forests that provide key ecological benefits. Alongside this HCVF work, the WWF and IKEA Co-operation on Forest Projects also led the identification of potential HCVFs at the landscape and regional levels within Northeast China and Inner Mongolia.

Taking HCVFs to scale

In 2006, China's State Forestry Administration incorporated the HCVF concept into the national guidelines on sustainable forest management planning. This means that areas identified as HCVFs will be designated priority areas for sustainable management or protection. These guidelines will be distributed to all provinces in China for implementation by local government or forest management units. This represents one of the most significant advances worldwide in making HCVFs part of national legislation.

Prayers carved on rocks in Baimaxueshan Nature Reserve, China. Forests with sacred sites have a high conservation value.

Colombia: HCV areas and palm oil

Colombia is one of the most important producers of palm oil in the American continent. An estimated 3.5 million hectares of the country's land is considered suitable for palm oil production and the national oil palm producers' association, Fedepalma, aims to increase production coverage to 2 million hectares by 2020. Some of the areas defined by Fedepalma as most appropriate include two of the priority ecoregions for WWF Colombia: the Orinoco river basin and parts of the Chocó ecoregional complex. Chocó is recognised worldwide as a conservation hotspot and an area with high levels of endemism, while the Orinoco watershed is one of the most biologically and hydrologically diverse areas on the planet.

WWF has been working with Colombia's palm oil sector for close to three years to help ensure that current and future cultivation of this lucrative crop is consistent with the conservation and sustainable use of the area's biodiversity. As part of this work, WWF has been promoting the identification of High Conservation Value Areas (HCVAs) in the Orinoco and Chocó ecoregions to support the spatial planning of palm oil plantations and promote regional land-use zoning and planning. A working group and a technical group on oil palm have been established to help define HCVAs. In the Chocó ecoregion, HCVs 1, 2, 3 and 4 have already been mapped, while in Orinoco, maps of HCVs 1 and 2 and trends in oil palm cultivation have been produced. These findings are currently being shared with local communities and the key social and cultural values, HCVs 5 and 6, are being mapped with the help of these communities. Over the next couple of years, WWF plans to help document and map HCVAs in the zones designated as having high potential for palm oil, and develop a participatory plan to avoid or reduce the biodiversity impacts of palm oil production. WWF also plans to promote the use of HCVs by key government ministries in the national-level strategic environmental assessment of the palm oil sector and in regional land-use planning.

Bolivia, Vietnam and Malaysia: HCVF beginnings

In Bolivia, a national HCVF guide for tropical forests was produced in late 2004. Developed by the Bolivian Voluntary Forest Certification Council, in collaboration with a number of experts and stakeholders, the guide has been distributed to various FSC-certified operations and other forest stakeholders. Bolivia currently has the largest area of FSC-certified tropical forests in the world.

A similar approach was adopted in Vietnam, where the first draft of an HCVF toolkit was created out of an expert workshop at the end of 2004. This toolkit was then field-tested in two different State Forest Enterprises in 2005 and 2006 to determine both the ecological and social values present. These two exercises revealed a number of ways in which the toolkit could be strengthened and refined. They also revealed the need to help the State Forest Enterprises develop effective protection measures to conserve those attributes found in their forest areas.

In Malaysia, there have been some isolated HCVF-related activities since 2003 although uptake of the concept has yet to take off in a significant way. Preliminary HCVF assessments have been conducted in several forest reserves and plantations, by WWF Malaysia, the State Forest Department and individual companies. For instance, an FSC-certified plantation company, Golden Hope, undertook HCVF assessments in two of its estates in Peninsular Malaysia, focusing on HCV1. The assessments identified intact areas which could be designated wildlife sanctuaries. These areas, though small, are important refuges for migratory birds. Meanwhile, WWF Malaysia is supporting development of the national HCVF toolkit and has been working with members of the Roundtable on Sustainable Palm Oil to promote the application of the HCVF concept in the palm oil sector.

Portugal: preserving a tradition

The HCVF concept is being used to help conserve Portugal's traditional cork oak forests. These forests are important as biodiversity hotspots, as sources of livelihoods for local people, and as providers of environmental services such as watershed protection and recreation. However, damaging policies, poor forest management practices and changes in the cork market have led to the decline of these ancient ecosystems.

In 2004, a pilot project for the first certification of cork oak forest in Portugal was the catalyst for classifying the country's HCV cork oak forests. Almost 1,000 hectares of cork oak forests are now FSC-certified. Elsewhere in Portugal, HCVF management guidelines are being developed and restoration work is underway in a fire-damaged forest landscape that contains HCVFs.

Japan: a commitment on paper

The Ricoh Group of office equipment companies, established in Japan, has gained worldwide recognition for its strong commitment to environmental sustainability. In 2003, the Ricoh Group set out environmental standards for paper products, with the aim of preserving 'forests of high conservation value'. This term, defined by Ricoh with the help of environmental NGOs, equates closely with the HCVF concept. Ricoh asks suppliers to comply with these standards both in terms of their products and their corporate activities. To judge the compliance, the Ricoh Group uses not only information collected by themselves but also additional information provided by selected third parties.

The Caucasus: cross-border HCVFs

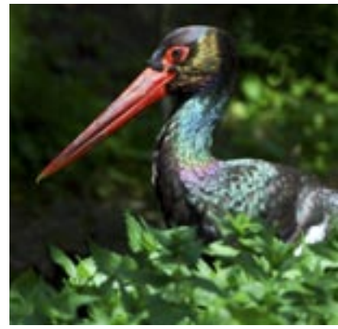
During 2003 and 2004, the World Bank/WWF Alliance led a transboundary HCVF project in Northeast Turkey and Southwest Georgia. The main objective of the work was to demonstrate the zoning of forests for protection and commercial/community use in this priority landscape of Colchic forests. An important activity was the preparation of regional criteria and indicators for HCVFs in close co-operation with Georgian and Turkish experts and stakeholders. HCVF mapping was then conducted in an 83,000-hectare pilot area and management prescriptions were developed for the 31,500 hectares of high conservation value forests identified. The HCVF maps and data were then provided to the Georgian authorities to support their forest inventory work.

Ghana: support for first FSC certification

WWF and Proforest have been supporting the development of HCVF work in Ghana. In 2006, the two organisations jointly organized the first national forum on HCVFs to discuss the uses and importance of the concept to Ghana, followed by a multi-stakeholder workshop that developed HCVF guidelines for the Ghanaian context. These guidelines represent the first national HCVF toolkit produced for an African country. Now a Ghanaian timber and plywood company, Samartex, plans to conduct the country's first-ever HCVF assessment. Samartex is committed to achieving FSC certification by the end of 2007 and has received extensive capacity-building support from WWF on various aspects of certification. The planned HCVF assessment will be an important one, not only as a means of helping to protect the globally important flora and fauna in the company's concession areas, but also as a model for other Ghanaian companies seeking certification.

The Baltics: NGOs map one HCV

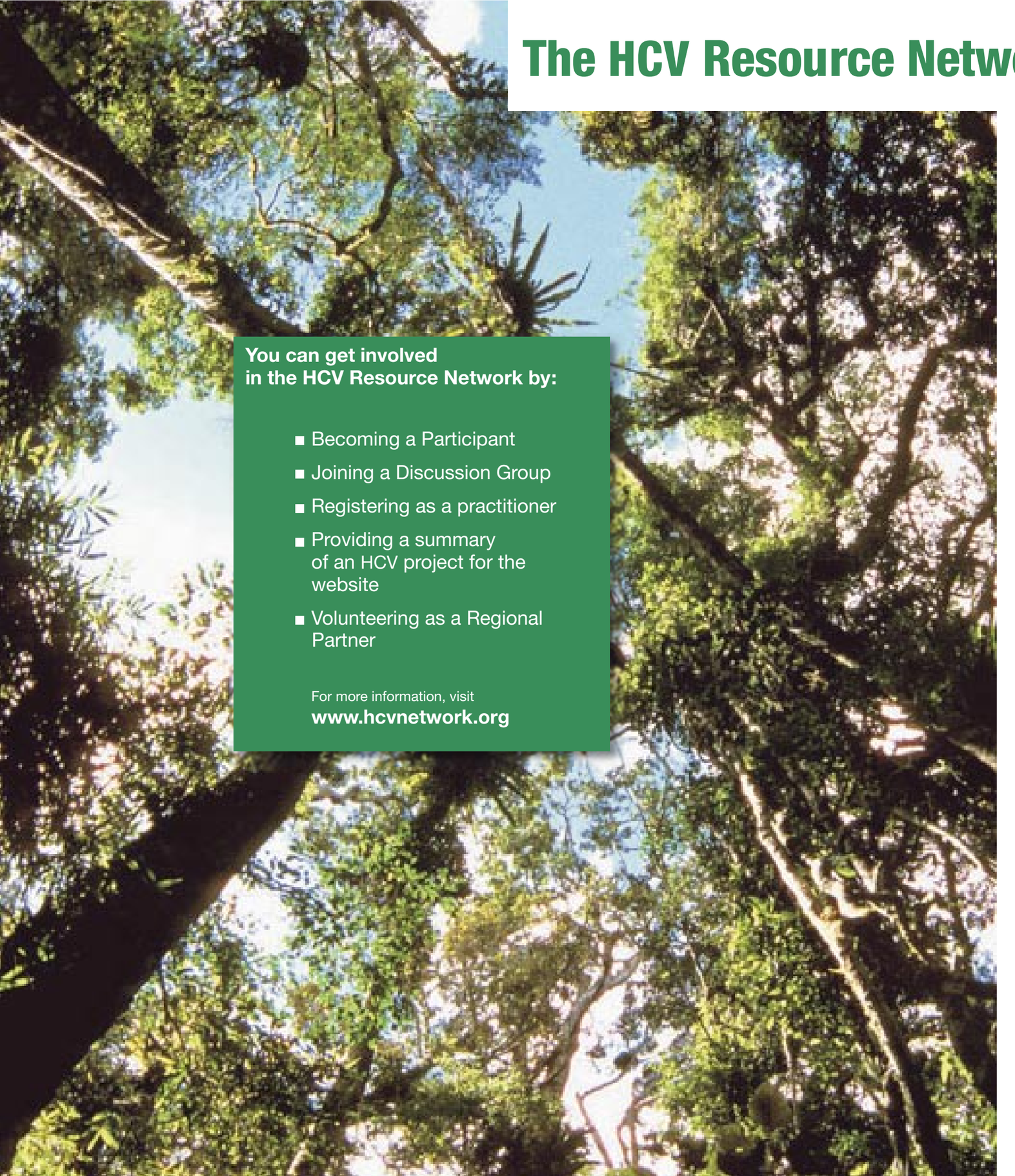
In 2001, two NGOs – Birdlife Finland and WWF Finland – launched a two-year project to identify potentially biologically valuable forests in Estonia, Latvia and Lithuania. The Baltic Forest Mapping (BFM) project essentially focused on HCV1, i.e. significant concentrations of biodiversity values. The study used existing data sources and established a set of 15 criteria for the designation of these valuable forests. These criteria included, for example, little or no signs of human influence, and the presence of large populations of rare or endangered forest-dependent species such as spotted eagle or black stork. The results, in the form of a GIS database and maps, revealed some major gaps in the protected area networks in these countries. In Latvia, for example, only 8 percent of the BFM forests were included in protected areas and, somewhat surprisingly, many of the country's existing forest protected areas did not meet any of the BFM criteria. These results implied a need to re-evaluate the protected area networks and to pay more attention to biodiversity conservation within commercial forests. The forest maps were presented in seminars for the government authorities and forest industries in all three Baltic countries.



Papua New Guinea: village-based HCVF assessment

In 2005, an HCVF assessment in Danaru village, Madang Province in Papua New Guinea set out to investigate the social and biological high conservation values within a forest managed by an FSC-certified community forestry operation. As well as identifying high conservation values to be conserved within the Danaru forestry management plan, the assessment also served as a field trial and stakeholder input for the PNG HCVF national toolkit. The local people were fully involved in the two-week assessment and explained their use of both plant and animal species, their traditional and current rules on collection and hunting, and their ideas on future protection of species important to them. The forest was found to contain many HCVs, such as the homes of ancestral spirits, sources of clean drinking water, and habitat for many endemic and threatened bird and mammal species. The Danaru logging enterprise is as low impact as you can get, using one 'walkabout' sawmill to carry roughly 150 m^3 of sawn timber per year out of their 10,000-hectare forest management area. While a neighbouring village had sold their standing timber to a large-scale logging company, the assessment team found that community forestry was the better option for long-term economic development, protection of property and maintenance of HCVFs in Papua New Guinea.

The HCV Resource Network



You can get involved in the HCV Resource Network by:

- Becoming a Participant
- Joining a Discussion Group
- Registering as a practitioner
- Providing a summary of an HCV project for the website
- Volunteering as a Regional Partner

For more information, visit
www.hcvnetwork.org

Two of the main challenges facing further development of the HCVF concept are:

- **facilitating the sharing of experiences and information between the different groups and individuals working on HCVF issues; and**
- **ensuring that the HCVF concept is consistently understood and applied.**

In order to help address these challenges, an HCV Resource Network was launched in 2005, with initial core funding from the WWF/World Bank Alliance, IKEA and Tetra Pak. A consulting firm, Proforest, was commissioned to facilitate the Network and set up a website (www.hcvnetwork.org) as a clearing house for information and technical assistance on HCV work.

The Network was developed by an Advisory Group comprising Forest Ethics, Forest Peoples Programme, FSC, Greenpeace, ITTO, IUCN, Mondi, Tetra-Pak, TNC, National Experimental University of Guayana (Venezuela), WBCSD, World Bank, and WWF. Based on extensive and open consultations with many different stakeholders, the Network launched a Charter in October 2006 which sets out the core concepts and guiding principles of the HCV Resource Network.

The Network's mission is "to maintain and enhance critical social and environmental values of forests and other ecosystems as part of responsible land management, and to advance locally adaptable management strategies through the development and use of the high conservation value (HCV) approach".

The structure of the Network involves: the Steering Group for oversight; the Secretariat for central facilitation; Regional Partners for local representation; and Discussion Groups and Working Groups to deal with specific issues.

The information and resources of the Network and participation in activities such as training and capacity building or Discussion Groups are open to all. Direct participation in Network development activities such as membership of the Steering Group or Working Groups, development of the HCV approach, and resolution of conflicts is open to those who register as Participants by agreeing to support the Network's Charter. In its Guiding Principles, the Charter sets out agreed definitions of High Conservation Value areas, and the acceptable procedures and methods for conducting HCV assessments. These comprise an approach that is:

- **knowledge-based, incorporating all relevant scientific data and local knowledge;**
- **participatory and inclusive; and**
- **open and transparent including peer reviews of findings and public reporting of outcomes.**

An additional component of the charter's guiding principles is a safeguard framework for applying the HCV concept outside an FSC certification context. This framework includes attention to the following issues: legality, tenure, customary rights, consent procedures and safeguards related to conversion.

Future of the HCVF concept

Where is the HCVF concept likely to go in the future, and how can it be strengthened to play an increasing role in the conservation and sustainable use of forest resources, to the benefit of people and nature?

From current trends in how the concept is evolving and expanding, it seems that the following developments are likely to emerge or become more apparent:

Inclusion of a wider range of interest groups: the scope of HCVF applications is expanding rapidly, and many different stakeholder groups working in a range of sectors will become involved in using the concept.

Extension to other ecosystems: as HCVF work is moving beyond the forest sector, the concept will likely transform from High Conservation Value Forests to High Conservation Value Areas – HCVAs. This is already beginning to happen, for example in recent work by the Argentine Wildlife Foundation to identify and map Valuable Grassland Areas in the South American Cone.

Safeguards to maintain consistency: as more and more HCVF work is being done outside of a forest certification context (where clear guidelines exist on how to assess and manage HCVFs), efforts will be needed to put in place safeguards to ensure that these non-certification applications fully address the key social and environmental issues at stake.

Improving methodologies: building on the HCVF toolkit and the experiences gained by HCVF practitioners around the world, new and more robust methodologies will be developed for assessing, managing and monitoring HCVFs – and, more broadly, HCVAs.

Strengthening networking: the HCV Network has already proved valuable as a means of bringing together those interested and involved in HCV work. The Network looks set to play an increasingly important role in promoting shared learning and discussion amongst HCV practitioners and other stakeholders on a range of priority issues.

Frequently asked questions

How does the HCVF concept fit in with other initiatives?

Identifying and assessing HCVFs does not require any new tools or techniques but rather can make use of existing information from other assessments and mapping exercises.

HCVF assessments can provide governments with valuable input to help them fulfil their forest and environment-related commitments, such as the development of national forest programmes, the nomination of Natura 2000 sites in Europe, and the implementation of the ecosystem approach of the Convention on Biological Diversity.

Is an HCVF a Protected Area?

No, not necessarily. Many forests identified as HCVFs lie outside of Protected Area (PA) networks. Designating a forest as an HCVF does not automatically mean it should be a PA. Many HCVFs continue to be harvested commercially, according to the management regimes recommended after the HCVF assessment. Others may be left as set-aside areas within timber concessions.

Do we want to create new Protected Areas?

The goal of the HCVF concept is not to create more Protected Areas. HCVF assessments, rather, can help evaluate the existing coverage of PAs in an area to see if they include all the critical conservation values present. Using the HCVFconcept can therefore help identify gaps in PA coverage and propose possible reconfiguration of a PA system.

How long does an HCVF assessment take?

A typical HCVF assessment involves several months of preparation and planning, followed by a month or so of fieldwork and another couple of months of analysis, discussion and development of recommendations. Stakeholder consultation – an important element of any HCVF assessment – can take a considerable amount of time and this needs to be taken into account when planning the work schedule.

What does it cost? Who pays for it?

The costs involved in an HCVF assessment include the convening of different stakeholder groups in participatory processes (workshops, consultations etc.) at various points throughout the assessment process; the hiring of outside experts and/or the training of local staff to address the environmental and social aspects of the work; and, if necessary, the development of locally-appropriate criteria and indicators for assessing the HCVs. In some cases, outside assistance is available to help cover some of these costs but the organization/company commissioning the assessment will probably need to commit to most of the budget.

How can we avoid an overly cautious approach, whereby all forests in an entire region are classified as HCVFs?

This scenario can be avoided by the development of a national (or sub-national) HCVF toolkit by a team of respected experts in a transparent manner. The toolkit needs to define robust and realistic thresholds for each of the HCVs to make sure these values really are critical ones.

Conversely, how can we avoid very superficial applications of the HCVF concept that are simply intended to justify forest conversion?

Here it is the make-up of the team conducting the HCVF assessments that is crucially important. The team members need to be highly qualified and independent experts who can back up their results with strong scientific evidence. Again, the process needs to be transparent so the forest owners/managers can be held responsible for implementing the management prescriptions identified by the assessment team.

“Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests.

Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.”

WWF is one of the world’s largest and most experienced independent conservation organizations, with almost 5 million supporters and a global network active in more than 100 countries.

WWF’s mission is to stop the degradation of the planet’s natural environment and to build a future in which humans live in harmony with nature, by:

- conserving the world’s biological diversity
- ensuring that the use of renewable natural resources is sustainable
- promoting the reduction of pollution and wasteful consumption.

WWF

for a living planet

PHOTOGRAPHS
© WWF-Canon: André Bärtschi, Andreas Beckmann, Olivier Van Bogaert, Homo ambiens/R.Isotti-A.Cambone, Alain Compost, Nigel Dickinson, Mark Edwards, Diego M. Garces, Michel Gunther, M Ridha Hakim, Martin Harvey, Ramy Inocencio, Hartmut Jungius, Volker Kess, Zig Koch, John MacKinnon, John E. Newby, Edward Parker, Fritz Pölking, Mauri Rautkari, Sebastian Rich, N.C. Turner, Anton Vorauer, Brent Stirton/Getty Images, WWF-UK

From Network and other sources:
© Image from BigStockPhoto.com:
Effner Heinz and Raymond Kasprzak, HCV Resource Network, Alberta-Pacific Forest Industries Inc, Boris Jenka

Written by
Jennifer Rietbergen-McCracken
with Gerald Steindlegger
and Chng Soh Koon

Thanks to all those who provided input, including: Fitrian Ardiansyah, Abraham Baffoe, Zhivko Bogdanov, Daniel Chong, Peter Dam, Ke Dong, Sander van den Ende, Nilofer Ghaffar, Mutai Hashimoto, Tony Iacobelli, Harri Karjalainen, Ian Kosasih, Elena Kulikova, Andrey Kushlin, Martha Lucy Mondragon, Henry Moreno, Ruth Nussbaum, Ilia Osepashvili, Duncan Pollard, Bella Roscher, Luis Neves Silva, Erika Stanciu, Christopher Stewart, Cesar Freddy Suárez, Rodney Taylor, Uan Le Cong, Wang Xiangyi, Ivy Wong, Tatyana Yanitskaya.

Layout by Wassmer Graphic Design, Switzerland
Printed by Ropress, Switzerland
on Cyclus paper (100% recycled fibre), using vegetable oil-based ink.

Forests For Life Programme
WWF International
Avenue du Mont-Blanc
1196 Gland
Switzerland

Tel. +41 22 364 9111
Fax +41 22 364 0640

www.panda.org/forests