

Understanding High Conservation Value Forest (HCVF) Implementation in intensively managed plantations

Report prepared by Marcelo Levy (RFS) for WWF US

1. Background

Plantation-based forest companies play a major role in the forest sector. In countries like Argentina, Chile and Uruguay in the southern part of South America, plantations provide the bulk of the wood forest products consumed domestically as well as exported. In other parts of the world, such as Brazil, South Africa, New Zealand and Australia fast growing plantations are also of great economic importance. In some tropical countries, plantations of high value timber (teak) are also common. For the most part, plantations are high yield, fast growing exotic species that provide principally economic benefits. Plantations can also play an important role in terms of decreasing pressure on natural forests while providing social and economic benefits. Many plantation-based forest companies have sought forest management certification to ensure their plantations mitigate environmental impacts, and provide the social and economic conditions for the conservation of natural ecosystems. In order to realize this potential, WWF wants to develop a strategy to engage plantation-based companies in improving its environmental and social performance.

One of the emerging tools used in forest management (and increasingly beyond forestry) to identify and protect critical or outstanding ecological, social, and cultural values is the concept of High Conservation Value Forest (HCVF). This concept has been developed by the Forest Stewardship Council (FSC) in its Principle 9, and has been implemented primarily through the certification of forest operations. A forest area designated as HCVF is one that contains outstanding, exceptional or critical attributes (e.g. habitat for rare threatened or endangered species, protection of water/soil quantity and quality, sites of cultural and/or religious significance). The identification and protection of these values is the cornerstone to the successful implementation of HCVF¹. The HCV concept started to transcend the forest certification context and expanded into other ecosystems as well as for conservation planning purposes.

Given this interest a group of organizations, ProForest, IKEA, the WWF-World Bank Alliance funded constituted an advisory group to support the establishment of an HCV Resource Network to provide a fora for discussion of its use in other ecosystems, its use outside the context of certification, and to facilitate the sharing of experiences around the world in the use of this concept. The network has also a number of toolkits for implementation of this concept, country and project pages detailing the use of the concept in various countries and projects and an HCV practitioners database. Examples of the use of the HCV concept can be found in Brazil where the Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (IBAMA) has used this concept for planning and establishing a protected areas network. Also in Brazil, standards for Responsible Soybean productions are being developed and addressing the issue of identifying high conservation areas that can not be converted to soybean agriculture. Other examples, include projects in Indonesia, where there is considerable interest in the inclusion of

¹ HCVF Toolkit, Part 1: Introduction to HCVF. 2003. (S. Jennings, R. Nussbaum, N. Judd and T. Evans)

the HCVF concept in landscape level planning exercises in areas where development of plantations is taking place, and for the development of a standard for Palm Oil production.²

WWF believes that there is great potential in the implementation of this concept in the context of plantation to ensure that plantations also meet ecological conservation and social goals. WWF is conducting a process (New Generation Plantations Project) to develop options for a standardized approach to applying the High Conservation value (HCV) concept in plantations. The project will include case studies and will develop conclusions and recommendations, in association with the HCV Resources Network. It is in the context of this larger project, that WWF has commissioned this preliminary research into how the HCVF concept has been implemented in plantations in FSC certified operations. Understanding key issues such as what information is available, the challenges encountered in implementing HCVs in plantations, the most common HCVs found, and whether non-forests HCVs were identified will provide good guidance to frame the research, select appropriate case studies, and investigate specific issues of concern to WWF.

2. Objective of the Preliminary Research

The objective of this preliminary research is to identify, analyze and provide a general understanding of the range of potential issues arising from the actual implementation of the HCV concept in plantations.

This research will focus on:

- Understanding plantations forestry in the context of the requirements of FSC's Principle 9 and its four criteria (Assessment of HCVs, Consultation, Management and Monitoring);
- Exposing potential issues related to conversion to plantations, use of exotic species, control of invasiveness of plantations on adjacent natural areas;
- The relationship between plantations and the six HCV categories;
- Assessing the challenges faced by forest managers in the implementation of the HCV concept in plantation;
- Tracking the most common HCVs identified either by the manager or through Corrective Action Requests (CARs) issued by the certification body;
- Tracking whether management objectives and strategies addressed the HCV identified;
- Whether non-forest HCVs were identified through the certification process including a description of the value identified.

3. Methodology

The analysis will be based in the review of Certification Public Summaries. The selection of the plantations attempted to reduce the possibility that the results be overly influenced by a number of variables and that they were of significant magnitude to affect critical ecological, social and cultural values (i.e. making an HCV assessment relevant).

The selection of the plantations was based on the following Criteria:

² HCV Resource network web site: <http://www.hcvnetwork.org>

- Large intensively managed plantations;
- Include plantations certified by different Certification Bodies;
- Include plantations in different countries/continents;
- Include plantations of different species; and
- Include special situations e.g. plantations as part of larger forest units, or plantations within national/state forests

4. Findings: Certification of Plantations under the FSC

Plantations have been certified all over the world. The FSC does not allow the conversion of forests existing after 1994 to plantations, and as a result, most certified plantations have been planted in former agricultural land (in many cases degraded/abandoned). Small (few hectares) and extremely large (over 200,000 hectares) plantations have been certified. Some certified plantations are publicly owned while others are private. In short, plantations comprise a broad range of sizes, ownership and objectives affecting a broad spectrum of environmental, economic, social and cultural issues. By analyzing how plantations have met Principle 9 (i.e. identifying and protecting critical, rare, or outstanding attributes) would provide insights into how plantations affect these issues.

4.1 FSC Certification Reports of Plantations

In order to provide a good sampling of plantations according to the criteria described above and used during this study, it is necessary to know what the universe of FSC certified plantations is. Unfortunately, this information is not available. Although FSC categorizes forest management in certified operations as natural (i.e. natural regeneration), semi-natural (where plantations generally supplement/complement natural regeneration), or plantation, there is no information on the number of plantations, nor they can be searched in their databases³. So it was decided with the coordinator for this project to review 20 Certification Public Summaries, as this is only a preliminary study.

The method used to identify plantations required a search of the FSC database by species, looking for the most commonly planted species (e.g. eucalyptus, several species of pines, teak). This created difficulties because species like poplar or some species of pines are commonly planted but they are planted under a semi-natural/natural regime, where planting of the species occurring naturally takes place to supplement/manage regeneration and silvicultural activities.. It was decided then, to focus on intensively managed plantations and not to use these semi-natural regimes. Intensively managed plantations were identified in countries like Australia, New Zealand, South Africa, Chile, Uruguay and Brazil where most of the plantations are either pines or eucalyptus plantations. The sample includes other species like Teak and also efforts in Africa to use plantations to reduce pressure on natural forests providing some income that also helps finance conservation activities in a National Park. It is interesting to note that in cases of very large plantations the scope of the certificate usually includes natural areas that become key conservation areas in the plantation management regime.

³ Matthias Fecht, Personal Communication April 29, 2008

Given the limitations in knowing size and distribution of plantations, this research provides some statistics that are only valid for the sample analyzed.

4.1.1 Geographic Distribution

In order to capture a wide variety of different circumstances, the plantations selected covered different continents. The opportunities were more limited in North America where plantations are not very significant or plantations have not been certified. In Europe, the prevailing regime is that of semi-natural. Certified intensively managed plantations are more prevalent in the southern hemisphere. So given the limitations described above in finding plantations it was difficult to distribute them evenly. As a result this is the geographical distribution of the sample analyzed.

Table 1. Geographical distribution of plantations included in the sample

Continent	Number of Certificates
Europe	2
North America	1
Africa	4
Australia/Pacific	4
South America	9
Total	20

In Europe the sample included plantations in Ireland and Spain. The key species planted in Ireland are: Sitka spruce, logdepole pine, larches, while in Spain the key species in the plantation included *Pinus pinea* y *pinus pinaster*, *Eucalyptus* spp, and *Quercus ilex* and *Quercus suber* (Oaks). In North America a relatively small (12,000 hectares) loblolly pine plantation was included. The plantations in Africa are mostly pine and eucalyptus plantations some of them large (about 80,000 hectares).

In Australia Pacific and South America most plantations are very large up to 400,000 hectares. Some of these very large plantations have almost half of its area comprised of natural forests. These natural areas are included in the scope of the certificate and are part of a conservation effort, usually including local Universities or research institutions, or at the very least are set aside (benign neglect?). It is remarkable that large intensively managed plantations include large natural areas in their scope, and therefore in their planning, management, and to a degree, operational activities. This situation provides interesting opportunities to test hypothesis around the idea that plantations could reduce pressure on natural areas, what are the impacts and trade offs.

4.1.2 Certification Bodies

A similar effort went into the distribution of the sample evenly among certification bodies. Given the difficulties described above and the fact that some CBs have a larger portion of the FSC certification business than others the sample is as balanced as it was possible to achieve. The final selection of plantation based forestry operations to be reviewed was the result of balancing location, the size of the operation and the Certification Body.

Table 2 Distribution by CB of plantations included in the sample

CBs	Number of Certificates
GFA	1
SA	3
SCS	4
SGS	8
SW	4
Total	20

The analysis of the Certification Public Summaries also proved complex since each Certification Body (CBs) has its own reporting format. All CBs use tables/checklists but the information is organized differently. In some cases, the results of surveillance audits are added to the original report while in others they are in a different document. In order to track how an issue evolved through the certification cycle, it was necessary to review several documents and find the appropriate references. As a result, the reports from the different CBs are different, with different depth in the information reported making it difficult to consistently assess trends in how forest management operations address Principle 9 and the assessment and protection of HCV attributes. Furthermore, in a few cases, CBs have affiliated organizations whose reporting differs somewhat from the CB's introducing more variation into the analysis.

The analysis of the Certification Public Summaries also revealed that the depth of information on HCVF was inconsistent. Some CBs have a paragraph that speaks to HCVF formally while others include comments on HCVF in a table where they record the assessment of each Criterion for Principle 9. A few reports have listed and categorized the HCV attributes identified while most certification reports do not. Reports will make reference to documents reviewed and HCVF assessment reports, but will mention HCV attributes rather briefly, and the HCV reports are not easily available. As a result of this in many reports it is difficult to follow and understand the rationale for the auditor's assessment.

In some reports, following the trail of CARs throughout the 5 year certification cycle is quite disconcerting. For instance, a minor CAR was assessed against 9.1 and while the CAR was closed at surveillance, a new minor was opened because the actions taken did not adequately meet the requirements of 9.1. A year later, the surveillance audit revealed that very little work had been done and the minor was changed to Major which was closed at the following surveillance audit. This trail of CARs seems to indicate a lack of effort in addressing the HCVF component until a Major CAR is raised, almost at the end of the certification cycle/period.

The positive side of the certification process is that in the end CARs seem to put enough pressure on forest operations to meet the standard. The negative side is that there seems to be some reluctance from forest operations to find HCVFs. While it is not possible to define “trends” for a small preliminary work like this there seems to be some evidence to further support this finding. In some instances, through addressing a minor CAR the forest operation conduct some wildlife studies that result in ambiguous “HCVF potential”, despite the fact that there is evidence of presence of rare threatened or endangered species. The lack of depth in the public certification reports makes it sometimes difficult to understand how the auditor is addressing this situation.

Summarizing the Public Certification Reports:

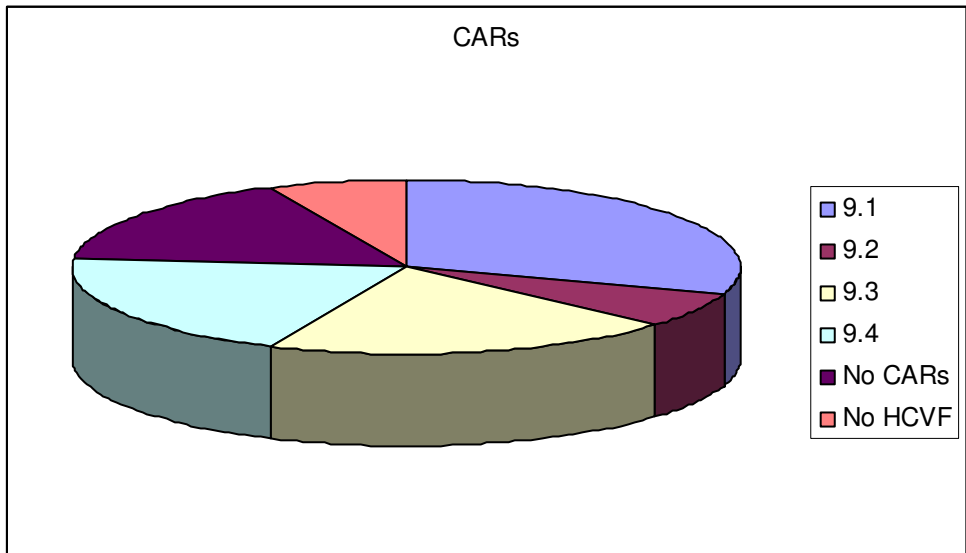
- All plantation based forest operations conducted HCVF assessments
- Only 2 reports categorize the HCV attributes
- Are written in different formats by different CBs resulting in inconsistent information across CBs;
- CBs working in different parts of the world provide different levels of information. While the format is the same, issues are not covered to the same depth
- Some reports provide very little information and therefore it is hard to understand the rationale for the issuance and closure of CARs

4.2 Meeting requirements in Principle 9

The Certification Public Summary Reports provide some insights into the activities that plantation based forest operations carry out in the identification, evaluation and protection of High Conservation Value Attributes. Criterion 9.1 of the FSC deals with the identification and assessment of High Conservation values. This Criterion is the first logical step in addressing the conservation of HCV attributes. Criterion 9.2 addresses the consultation aspects of the HCV identification carried out by the manager. Criterion 9.3 addresses the management activities to protect or enhance the identified values and Criterion 9.4 addresses the monitoring of the effectiveness of the measures taken to protect identified values.

It is only logical that during the life of the certificate all operations have to address Criterion 9.1 first. Consistently with this concept, Criterion 9.1 was the Criterion with most Corrective Action Requests (CARs) in this preliminary research. There seems to be some interesting correlations that were not explored, between the CARs and the initial date of issuance of the certificate. It seems that in the early stages of the certificate CARs tended to be issued against 9.1 (Assessment) and (less so against Criterion 9.2 (consultation). CARs against Criterion 9.3 (Management) and Criterion 9.4 (monitoring) were usually issued after the HCVF assessment took place. Very few CARs were issued for Criterion 9.2 (2) and an equal number of CARs (6) were issued for Criterion 9.3 and Criterion 9.4 . The table and graphic below summarizes the data for CARs issued against each of the Criterion including no CARs and no HCVF found. An important aspect of this is that of the sample only two operations carry out an HCV assessment and did not find any HCVs. All the others found HCV in their plantations and have identified them and develop some management strategy to protect the values identified.

Criteria	9.1	9.2	9.3	9.4	No CARs	No HCVF
CARs	9	2	6	6	5	2



4.3 HCV Attributes in Plantations

The HCV attributes are classified into 6 categories:

- HCV1: forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia);
- HCV2: large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance; HCV3
- HCV3: forest areas that are in or contain rare, threatened or endangered ecosystems
- HCV4: forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control)
- HCV5 forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health)
- HCV6 forest areas critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).

The review of the HCVF assessments reveals that, for the most part, there is no categorization of attributes in the reports either by the operation or the CBs. Only 2 out of the twenty reports reviewed, formally categorized and listed the attributes found. As discussed above, in some instances the assessment resulted in ambiguous HCVF potential. In other cases, the HCVF attributes are described (e.g. RTE species, watershed protection, significant wetlands), and they are not categorized in the report. The HCV attributes tabulation as described in the table below is the result of the interpretation of the information provided in the reports.

HCV1 for the most part was a reference to rare threatened or endangered species and in a few instances references to endemic species. HCV3 were identified as remnants of virgin forests or existing natural vegetation. It should be noted that 16 out of 20 certificates cover an area that includes natural forests and plantations. In general, the natural forest tends to be protected and excluded from the “production forest” (i.e. the plantation). More importantly, however is that through the certification cycle (in spite of the issues identified above) managers are not only setting aside natural areas but they are actively managing them for conservation. For instance, in one plantation the operator designated areas as genetic reserves (containing typical native plant communities) that were initially considered as potential HCVFs. To close out these CARs the company contracted out the research into flora and fauna and has carried out a Rapid Ecological Assessment, with plans to establish corridors to connect reserves and legally protected areas.

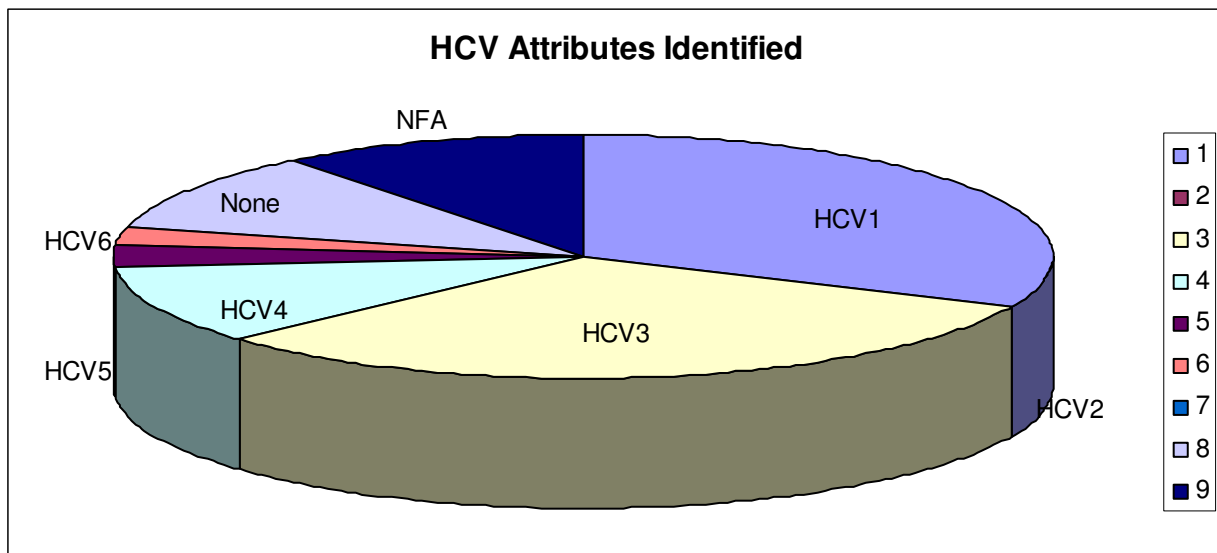
In terms of the most common attributes found HCV1 and HCV3 topped the list. HCV1 included RTE species while HCV3 included remnant natural forest and non forest ecosystems (wetlands, grasslands, and geological formations). Next in the list, with 4 instances, there is the protection of watershed, water quality and quantity (HCV4). In 2 instances the HCVF assessment was carried out and no HCVF was found. During the HCV assessments Non-Forest Areas were designated as HCVF. They include, for the most part wetlands, grasslands and in one instance a geological formation.

Of all the reports reviewed there was only one instance in which an HCV5 forest (forest area fundamental to meeting the basic needs of local communities) was identified.. This was a small scale plantation that produces timber for economic value and to reduce the pressure on the adjacent natural forest. It also serves as a demonstration for tree planting to nearby communities. Similarly only one HCV6 (site of cultural/spiritual significance) was found. In this situation a CAR was issued requiring the operator to continue its efforts in contacting Indigenous Peoples regarding sites of cultural significance⁴). Should be noted that a portion of the unit was managed with an aim to recreate a mixed hardwood-conifer forest consistent with historical records. It is interesting to note that no large landscape level forest (HCV2) was identified. One explanation could be the fact that this research focused on plantations and although some plantations include large natural areas, perhaps they are not large enough to categorize them as large landscape level forests.

⁴ While the CAR was raised against Principle 3 (Indigenous Peoples’ Rights) it can also be understood as having identified an HCV6 since the CAR is explicit about sites of cultural significance.

Table 3 Most common attributes found in sample of plantations

HCV Attributes Categories	Number of HCVs identified
HCV1	12
HCV2	0
HCV3	12
HCV4	4
HCV5	1
HCV6	1
None Identified	4
Non Forest Areas	4



4.3 Other Critical Issues in Plantation Based Forestry

Other common issues identified are the use and management of chemical pesticides, and the control/monitoring of invasiveness of the planted (usually exotic species). These two issues often resulted in CARs. Public consultation was in some cases an issue that raised CARs but in others it was not an issue at all, with companies collaborating with universities, government agencies and NGOs. Representative ecosystems and protected areas (6.4), and identification of RTE species were sometimes identified and resulted in CARs. In some cases, the CARs for these

issues were related to lack of information or to lack of integration of these issues in the overall landscape level planning.

5. Conclusions

This preliminary study was based exclusively in the review of Certification Public Summaries. As such it provides some insights into the limitations of using the public summaries as the sole source of information. As described in the sections above, the reports vary in depth and consistency of information. There are also some more basic problems related to the lack of statistics kept by the FSC into which certificates are plantations, and what constitutes a semi-natural forest. This lack of information and clarity excluded from the research certain type of plantations due to the uncertainty regarding whether they were considered plantations or not. Given the controversy around certification of plantations, in particular, the use of exotic species and the fact FSC is reviewing Principle 10, it is important to have some basic statistics and clear categories, to facilitate understanding of the broad role of plantations, and their impact at the ecological, social and cultural levels.

Despite these limitations, this preliminary study can point to areas where further research could be undertaken to better understand:

- The prevalence of HCV1 and HCV3 as the most common attributes identified while other attributes are barely or not identified;
- The nature of the differences between plantation and semi-natural forests in order to include other areas of the world where semi-natural forests are significant (e.g. China);
- Specific management actions implemented for their protection;
- Impacts of the use of pesticides and the risk of invasiveness on natural ecosystems;
- The interplay between plantations and the natural environment.

It is hoped that further research into these issues provide a better understanding of the role plantations can play in reducing the pressure on natural ecosystems, and in providing opportunities for their protection.