A technical comparison of the HCV and HCS approaches

The HCV and HCS approaches are both designed to mitigate environmental and social impacts. This document is a brief technical comparison that summarises their overlap and the main differences. It should be of interest to a range of HCV and HCS users, including assessors and companies.

What is the High Conservation Value (HCV) approach?

Background

The High Conservation Value (HCV) approach is designed to maintain or enhance environmental and social values in production landscapes. It is based on six values covering **species diversity (HCV 1), landscape-level ecosystems (HCV 2), rare ecosystems/habitats (HCV 3), critical ecosystem services (HCV 4), community livelihood needs (HCV 5)** and **cultural values (HCV 6)**. HCVs are those values that are considered outstandingly significant or critically important, at the national, regional or global level for HCVs 1-4 or locally for HCVs 5 and 6. Thus, it is not designed to prevent all deforestation, but to maintain environmental and social values of particular importance. They are evaluated by HCV assessors based on existing literature or data sources, stakeholder consultation and field work.

The HCV approach was first developed by the Forest Stewardship Council (FSC) and was adopted in 1999. It is now used by a range of certification schemes, including the Roundtable on Sustainable Palm Oil (RSPO) and the Round Table on Responsible Soy (RTRS), and has been applied globally in tropical, temperate and boreal regions. The HCV Resource Network (HCVRN) was established in 2006 to promote the consistent application of the HCV approach across sectors and geographic regions. The HCVRN provides tools and guidance for HCV assessors, to promote assessments that are both globally consistent and locally appropriate, and is launching the HCV Assessor Licensing Scheme in October 2014 to improve the quality of HCV assessments.

In practice

HCV assessments are carried out for particular management units (MU), and in conversion contexts the assessments should be done before any land clearance or production activities start. The aim of an HCV assessment is to identify whether HCVs are present and if so where they are located. Assessors then recommend management and monitoring measures to ensure the identified HCVs are maintained or enhanced. When data on HCVs is lacking, final HCV decisions are guided by the precautionary approach to minimise the risk of damaging HCVs (Brown et al 2013).

HCV identification involves:

1) **Preliminary desk-based research on potential HCVs in the MU, using:**
   - Satellite imagery and aerial photographs
   - Literature searches and reviews
   - Expert consultation (social and environmental experts) on possible HCV presence/absence
2) **Field HCV identification** (typically including a short scoping visit and a longer field assessment)
   - Community consultation (expected to feed into wider Free, Prior and Informed Consent (FPIC) process)
   - Ground-truthing of remote sensing data and new data collection

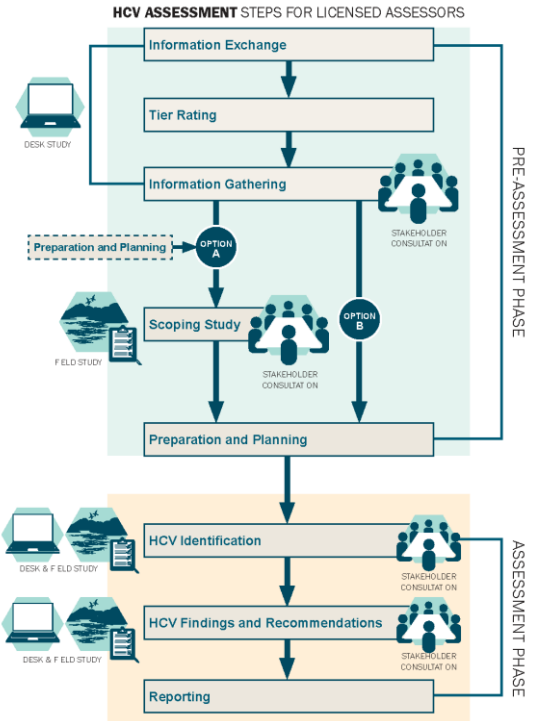

Figure 1. HCV assessment steps for licensed assessors

- Initial threat assessment

3) **Final stakeholder consultation**, in order to:
   - Document outstanding stakeholder concerns
   - Gather expert and stakeholder concerns on management and monitoring recommendations
4) **Final HCV designation, maps and management and monitoring recommendations sent to the company developing the MU** who are then responsible for producing the final HCV management and monitoring plans for implementation.

What is the High Carbon Stock (HCS) approach?

Background

In February 2011, palm oil company Golden-Agri Resources Limited (GAR), and subsidiary PT SMART Tbk, revealed a new 'Forest Conservation Policy'. This was motivated by concerns that oil palm plantations could convert forest areas, that are not primary or of HCV, and still be certified as sustainable under certification schemes that use the HCV approach. Thus, the ultimate aim of GAR's policy was to have a **no deforestation footprint**, and hence to protect forest biodiversity, carbon stores, and communities reliant on forests. This is a combined policy for no conversion of HCV, peatland or HCS areas for palm oil plantations.

GAR recognised that there were already established approaches for identifying HCV and peat areas, but not for HCS areas. Thus, they collaborated with Greenpeace and The Forest Trust (TFT) to develop a methodology for identifying HCS areas. In 2013, this was named **the HCS approach**. Subsequently, other companies (inc. APP, Wilmar, Unilever) and the Palm Oil Innovation Group[1] have also made commitments to protect HCS areas, but GAR's HCS approach remains the only one to date that includes any technical details on how HCS should be implemented in practice.

In practice

The HCS approach is not just a methodology for identifying areas of High Carbon Stock. It is a strategy for **no deforestation** and for defining and protecting **'viable forest areas'** (Greenpeace, March 2014). It is designed to protect viable HCV and HCS areas, and community lands. It does not include peatlands, with the reasoning that these should be covered by separate 'no peat conversion' policies. It is not a tool for carbon accounting.

The main novelty of the HCS approach is its methodology for separating HCS areas (natural forest) from non-HCS areas (degraded land). The HCS approach defines a threshold between natural forest and degraded land using six vegetation classifications that can be identified using satellite imagery and field plot measurements. The classifications are: *High Density Forest*, *Medium Density Forest*, *Low Density Forest*, *Young Regenerating Forest*, *Scrub* and *Cleared/Open Land* (see GAR and SMART 2012).

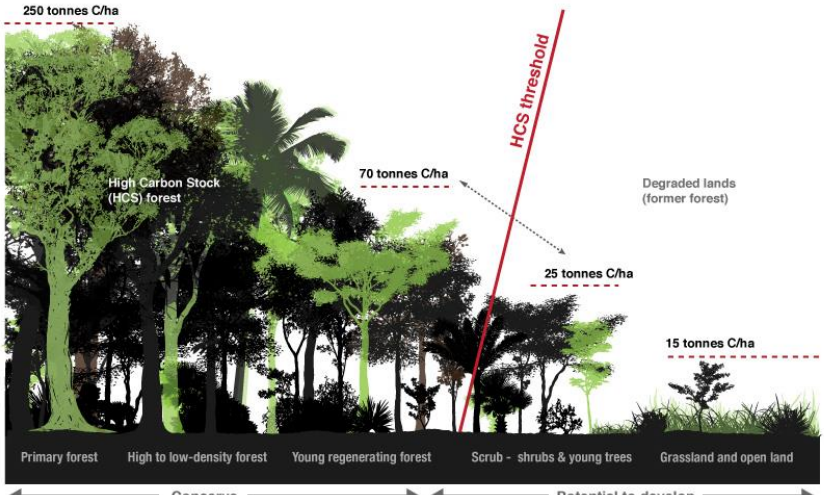

Figure 2. Schematic of the HCS threshold used for the HCS approach. Taken from Greenpeace 2014.

The (provisional) HCS threshold falls between *young regenerating forest* and *scrub* *(Figure 1)*. These are respectively described as '*mostly young re-growth forest, but with occasional patches of older forest*

[1] A group of international NGOs and palm oil producer companies.

within the stratum' and '*recently cleared areas, some woody re-growth and grass-like ground cover*'. This threshold was used by Greenpeace for trials in Indonesia (Kalimantan) and Liberia. Greenpeace state that the vegetation stratification method, but not necessarily a carbon threshold approach, should be widely applicable across the humid tropics (GAR & SMART 2012). However, the methods have yet to be widely field-tested.

Although a detailed methodology has not yet been developed, the HCS approach methodology as currently applied has two key phases (see also Figure 2):

1) **Preliminary identification of HCS areas and land used to meet communities' basic needs**
   - HCS areas identified by vegetation classification using satellite imagery and field data,
   - Land used for meeting communities' basic needs are excised from development plans.
2) **Identify ecologically viable forest areas to protect and restore**
   - Overlay HCS, HCV and peat areas, then identify viable areas (i.e. those that can revert to their natural ecological function as a forest),
   - Viability defined using:
     - **i.** Patch analysis of shape, size, connectivity, habitat quality and threats (patch size especially important),
     - **ii.** Ground verification, community consultation (FPIC) and rapid biodiversity assessment of small patches.

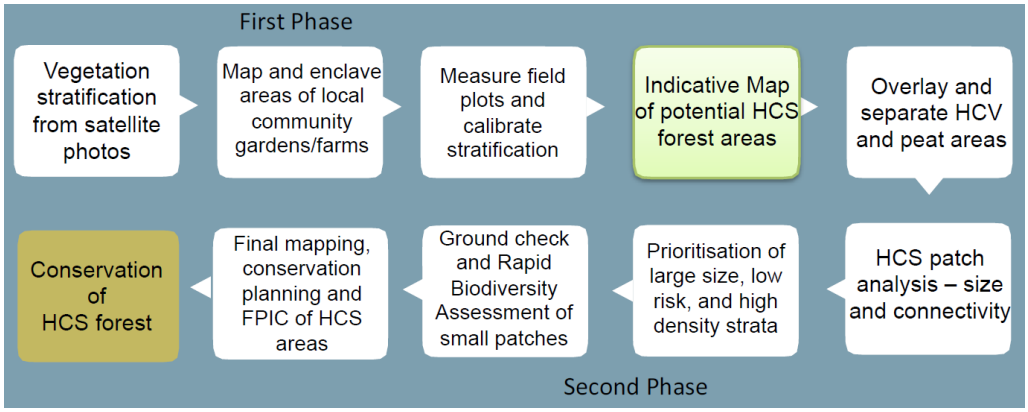

Figure 3. The steps in the HCS approach. From Greenpeace, March 2014

Comparing the two approaches in practice

The HCV and HCS approaches overlap substantially in practical terms, in that the HCS approach depends upon an analysis of ecological values and the identification of social values through community consultation, together with a final conservation planning stage. The HCS approach, as currently defined, also explicitly incorporates the findings of an HCV assessment.

Certain aspects of the two approaches do have a differing emphasis:

- **Analysis of forest patch viability** – The HCS approach includes a patch analysis step to identify whether HCV and HCS areas are viable. Greenpeace say that the main aim of this step "*is to protect and restore ecologically viable areas of forest*" (March 2014). This step includes the "*prioritisation of large size, low risk, and high density strata*" (Figure 2), suggesting that non-viable forest patches can be converted. However, the criteria used to identify viable patches under the HCS approach is yet to be defined. On the other hand, the HCV approach makes no explicit mention of viability and instead requires the maintenance of 'critically important' or 'outstandingly significant' values.

- **Identification of community lands** – Because the HCS approach incorporates an HCV assessment it should include the same assessment of HCVs 5 & 6. The HCS approach also requires the protection of any land used to meet the basic needs of communities, including "community gardens/farms" (Figure 2). The HCV approach also aims to maintain sites fundamental to meeting basic needs of communities, and yet

excludes subsistence farmlands under the assumption that they would be considered under the wider FPIC process. Under the HCS approach, land used to meet communities' basic needs is identified by an initial community consultation step and a final FPIC process on HCS areas. It is unclear whether these FPIC negotiations are intended to deal with conflicts between community use, HCS and HCV areas

The main clear difference is that the HCS approach includes the following additional component:

- **Vegetation stratification and identification of HCS areas** – The HCS approach aims to protect areas of forest with significant levels of carbon. Such "HCS areas" are not necessarily protected by the HCV approach, unless they are primary forest or are required to maintain HCVs. Methodologically, HCS areas are identified through a process of vegetation stratification using satellite imagery and field measurements, to define vegetation classes. This vegetation classification rarely features in HCV assessments.

Next steps

The brief analysis above outlines the similarities and areas of divergence between the HCV and HCS approaches, and some of the methodological challenges to applying both approaches. Given the growing interest in both approaches, further clarity is needed on the social and environmental implications of applying them in different national contexts. Most crucially, the clear overlap between the two approaches shows the need to understand how they can work in tandem, and be combined in practice to ensure that environmental and social impacts are identified and then mitigated as efficiently and effectively as possible.

References

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