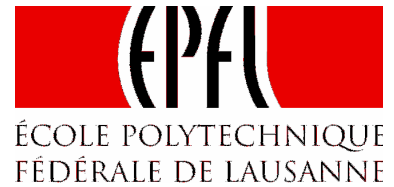


# Roundtable on Sustainable Biofuels

An initiative of the EPFL Energy Center



## 5<sup>th</sup> Virtual Meeting of the Working Group on Environment (full minutes)

4<sup>th</sup> of December 2007

### *1. Objectives of the meeting:*

In the frame of defining criteria on conservation and biodiversity, this 5<sup>th</sup> meeting aimed to find a consensus on the synthesis suggested in the background paper n° 17 (“Draft Synthesis on Conservation Criteria”) regarding **Criteria and Principle on Conservation**.

As per the timeline, the Working Group was supposed to deliver a first draft of criteria by the month of December. On the one hand, it appears that more time is needed for discussions and the RSB Secretariat is committed not to “dash” the work on criteria. On the other hand, we have to follow the timeline agreed by the Steering Board. The intermediary possibility is hence to deliver a progress report and it appears that a table would be a good and clear format to present the main outputs of our discussions without a fixed wording, while raising all the points that need further debate.

**The synthesis table (Criteria on Conservation) with the latest edits from the conference is included in the last page!**

GENERAL COMMENTS AND QUESTIONS FROM PARTICIPANTS
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- 1) What can we do in order to bring the **necessary modifications in the existing biofuels programs**, which have adverse impacts on ecosystems? Ex: large scale jatropha plantations promoted by Indian government in areas where biodiversity or HCVs are not taken into consideration? No impact assessment was ever conducted, program was simply launched without precaution. How can we do to **influence this particular policy**? This question is not to be answered now, but we should move ahead on that and keep it in mind.

#### **Answers/Comments:**

- The RSB has not formally decided of the type of interaction it aims to have with governments. The influence of standards at such a high and global level looks critical.
- Governments may comply with the standards voluntarily and the answer is probably to produce the best set of principles we can, which means “clear and actionable”.
- **Principles should be action-oriented**; otherwise it will not have enough impact.
- Limitation is the workability from a business perspective, or as compared to national targets (need for huge amount of land and inputs).

- 2) How can we assume that the producers (big or small) are able to **distinguish HCVs**?

- The answer we received to this question in Shanghai was that **farmers were very unlikely to be able to identify such areas without a technical support**. Some

partnerships were already set between producers and local environmental agency (WWF also). The intention is not to leave farmers alone with the identification of HCV areas. Companies with sufficient means (consultancy for instance) might be able to implement to HCV toolkit on their own. This question is to be passed to the Working Group on Implementation.

- 3) **Biodiversity offsets** are necessary due to the low level of awareness about the importance of biodiversity. Big companies who wish to start production or plantations on large areas have to pay for the biodiversity loss they may cause, whether they are aware of it or not. This is a very good instrument in agriculture to monitor compensation.

## ***2. General News:***

### **- General:**

As a reminder, for each topic to be covered in the principles on environment, the RSB aims to set **Expert Panels** that would ease the discussion within the Working Group, by making a certain number of suggestions, including on the wording of the criteria. The first Expert Panel was set in September and has made some suggestions to the Working Group on Environment on the aspect of Conservation throughout the past weeks.

The 2<sup>nd</sup> Expert Panel has recently started discussing the questions of **biotechnologies**. The objective is to suggest the **necessary criteria to promote the use of sustainable biotechnologies** to the Working Group in a similar fashion as for Conservation. Debates are already intense, but very constructive and it is a great chance that the panel includes people from the scientific world, the industry, the agriculture and the civil society. Ideas and opinions are confronted in a positive way, although it is always delicate to stay in a very factual frame because there are not too many long term studies on GMOs effect for instance. The RSB is hopeful that the Expert Panel will be able to suggest a **first draft of criteria to the Working Group by the beginning of 2008**. All the ongoing discussions will be posted on the wiki so that the Working Group can rapidly join the debate.

### **- RSB in Shanghai:**

Similarly to the conference held in Brazil in October, **the RSB has held a side event during Michelin's Bibendum challenge in Shanghai on the 13<sup>th</sup> and 14<sup>th</sup> of November**. This platform is dedicated to the future of transports and brings all the industries related to mobility together to share their progresses, with of course a current focus on energy efficiency and low emissions. **Thanks to Michelin's generous sponsorship, the RSB in partnership with the UN Environment Program has invited almost 40 participants from several East Asian countries, US and Europe** to share their vision and concerns regarding biofuel production in their geographical context. East-Asia has already suffered much from the Palm Oil industry, although it was mainly for food industry, but the increasing demand for biodiesel is likely to worsen the situation.

The loss of huge forest coverage in Indonesia, Malaysia, the Philippines or Cambodia, in addition to the numerous conflicts between small farmers or indigenous people and companies has brought much **skepticism and distrust toward biofuels** and the RSB initiative. For the most vulnerable people in these countries, it is likely that **biofuels will just represent a new excuse to extend the unfair and unsustainable schemes applied in the past for intensive farming and aquaculture.**

It is hence a great challenge to convince local people, grassroots organization, environment protection agency, that our commitment is genuine. In Shanghai, the RSB made a strong call toward the representatives who were present in Shanghai, to join us in a more sustained way. They must take their responsibilities as the ones to bring forward local issues and interests, otherwise no one will.

One of the major outputs of the discussions was the need to enter into a sincere discussion process with small holders and indigenous people and to establish the **local access to benefits as a priority**, since many farmers or indigenous people face a lose-lose situation so far...

The discussions on the RSB environmental principles and criteria have not brought many complaints and no important aspects seemed to be missing, except maybe regarding marine ecosystems (*see the rest of the discussion below*). **The use of HCV concept was strongly encouraged** by the representative of WWF Malaysia, who has been involved in national mapping of HCV areas and implementation within the Roundtable on Sustainable Palm Oil standards. In these regions, there is an urgent need to secure and protect peatlands and mangroves, which are among the most fragile and threatened ecosystems. Depending on the interpretation of HCV Areas, these 2 ecosystems can be considered as such but in doubt, should we quote them more explicitly in our criteria?

#### **- RSPO:**

The **Roundtable on Sustainable Palm Oil** has held its 5<sup>th</sup> Roundtable in Kuala Lumpur the week after and it was very enriching to follow the discussions, as they are far ahead in the process. A visit of a plantation which successfully implements the RSPO standards and best practices was organized. Although it is far from being the general practice, it is encouraging to see that sustainable Palm Oil production is concretely possible. There is a real benefit for the plantation since Unilever is now to sell certified products from this kind of channel.

In Shanghai and Kuala Lumpur, the RSB staff has asked many experts about the **reliability of the HCV concept**, whether there were any loopholes, anything they had ever seen missing in the implementation. All of them ensure that as a concept, the HCV was enough to cover every possible area (including fragmented ecosystems which in turn, can be considered as several smaller HCV areas), mainly because the intermediary step to be promoted is a **national interpretation of HCV areas**, as it was done in Indonesia in partnership with the WWF. It is actually this interpretation, which is crucial, as it leaves room for adjustment and once this national interpretation has been done, the concrete criteria for HCVA are defined as per the local context and hence made exploitable by farmers through a mapping. In summary, the HCV concept is ok as far as one keeps an eye on the national interpretation made.

Another national interpretation and mapping was mentioned earlier for Russia by the World Resource Institute.

In case no national interpretation exists, the **HCV toolkit** is used by producers but so far, only large producers were able to achieve the HCV identification. Our concern for the access of smallholders (40% in the case of PO) is hence justified. So far, the RSPO has not solved this problem.

#### COMMENTS AND QUESTIONS FROM PARTICIPANTS

- **Has Malaysia developed a national interpretation and mapping of HCV Areas?** Yes, in partnership with WWF and Global Environment Center. Not many countries have done this so far (Russia and Indonesia do, Brasil and Colombia are on the way), but it looks like a process to be encouraged somehow.
- This practice of **National Interpretation** should be promoted to a greater extend.
- It was mentioned that **large holders** were more able to access the tools to identify HCV areas. How is the difference between large and small producers defined? The Secretariat will look for more information on that, since it is relevant to any definition of scale.

[NB: The following statement was found on the RSPO website: “Smallholders produce a significant proportion of the world's palm oil. Some 30% of CPO in Indonesia comes from smallholdings, 10% in Malaysia, 50% in Papua New Guinea and as much as 90% in Nigeria...” Malaysia currently considers palm plantations holdings **below 40 ha** as smallholders, but the size is unlikely to be considered enough for such a definition, as the definition is always subject to a lot of debates].

Additional information about the RSPO’s **Smallholder Task Force (STF)** can be found at: [http://www.rspo.org/STF\\_Background\\_-\\_Introduction.aspx](http://www.rspo.org/STF_Background_-_Introduction.aspx)

### *3. Discussion on the content of the Synthesis Table :*

[The original version of the table is included in the background paper n° 17. The synthesis table with the latest edits from the conference and after is included at the end of this document.]

#### COMMENTS FROM PARTICIPANTS BEFORE THE CONFERENCE

- In the good practice section, the following terms should be added: *no-till practices, green harvesting (no pre-harvesting burning), one-pass harvesting system.*
- As strict conservation criteria might be unrealistic from a business perspective, some participants are in favor of the **introduction of the concept of offsets and compensation mechanisms**. This is actually presented as a major incentive for protecting forest by giving compensation to owners or countries who dispose of HCV areas, which render significant ecosystem services.

- **Peatlands, Mangroves and marine ecosystems might need to be clearly mentioned.** As the HCV concept was first developed for Forest, then for other terrestrial areas, it is said that marine/coastal ecosystems may fall apart from the HCV definition. As regards the 3<sup>rd</sup> generation of biofuels, we heard that algae cultures could have the same negative effects on coastal ecosystems as the shrimp intensive aquaculture (Brazil, Indonesia, etc...). After checking the HCV website and there is a mention that from the original definition of HCV forests, the concept was now extended to any kind of ecosystems, without any distinction between terrestrial and marine ones. Furthermore, the RSB has recently enquired among the HCV network on this point; the information will be shared among the Working Group members.

COMMENTS FROM PARTICIPANTS DURING THE CONFERENCE
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- **Mangroves** can already be considered as HCV ecosystems.
- There are efforts going on to **extend the HCV concept**, so that people do not consider it applies to terrestrial ecosystems only.
- Some participants want to make the point that **there is no consensus yet on the concept of offsets as a compensation mechanism in the standards.** This raises a lot of concerns about whether or not a valuable ecosystem that would have been lost could actually be replaced and whether or not compensation would be suitable for trying to replace or compensate companies for having removed this kind of habitat. As some participants understand the concept, a producer would be allowed to remove a particular area and put it into biomass production, and would then have to recreate or preserve an equivalent area somewhere else.
- **Some participants may have a different understanding of offsets.** If it is a compensation given to people to maintain habitats, it is different from allowing companies to remove habitats in some areas by paying a penalty or replace this habitat elsewhere. The second scenario is more problematic.
- **7.b in the table:** “when development in these areas is unavoidable, there should be compensation...”. This is very problematic. **Once HCV areas are identified, those should not be destroyed. Full stop.** As we are looking for sustainability standards, we cannot consider clearing HCV areas as sustainable. Opening a gap on the fact some habitat, no matter how important, can be cleared if somehow compensated and create a whole system where you shift it around is very problematic. **It is risky to introduce this concept at the criterion level,** as it would give ways to less efforts in terms of non HCV land identification, but on the other hand, several considers that a too strict principle is not workable from a business perspective and that compensation mechanisms must be introduced somewhere.

- **The current wording on offsets (in the table) is not approved** and the fact it is mentioned in the table gives the impression that offsets are associated with the criteria. It must be said somewhere that the issue of offsets has been raised but this is not be incorporated in the table in any fashion. **Furthermore, this aspect has not been discussed by the Expert Panel.**
- Some participants have troubles separating offsets from compensation. Does the problem reside in an offset program or a mitigation program or the idea of introducing some kind of financial compensation (money)? In fact, mitigation programs are well-known and can be well managed.
- **Mitigation and compensation are two different things**, at least in the European legislation context. **Compensation** means that one destroys a hectare somewhere and then you compensate by restoring a hectare somewhere else or by preserving or improving the quality of what is left. **Mitigation** is about minimizing negative impacts. Compensation can also be understood as paying a farmer in order to compensate him for maintaining an area as an offset. This would be more acceptable than the scenario where destroying some habitat is compensated somewhere else. There is no problem with mitigation, which should be used as often as possible. The question is about when there is no mitigation possible, as in the case of clearing a forest, is it allowed or not and would it be allowed if it is being compensated or offset somehow. This is the contentious point.
- From the business perspective, it looks like **compensation is the last resort** (avoid, minimize and mitigate before compensate). It has been hear often that we should leave this open, otherwise it will be unrealistic.
- One of the Working Group members is **expert in the biodiversity offsets**, having been working on that for years and the group should have his comments on that (*Note: the secretariat has already asked him whether he could provide the group with some technical information about offsets*). This does not mean that the group suggests including offsets in the standards but **this type of mechanism is bound to happen**. For instance, some impact assessments are made on the Special Economic Zones (India) where impacts on biodiversity are to happen. Some guidelines are being developed to compensate the losses that are going to happen.
- However, **other existing certification systems (RSPO, FSC...)** have not **integrated this concept of compensation**. Even industry-sponsored initiatives have recognized that there are ecological areas, which should be protected and this concept of allowing destruction in a given area if one can recreate another is not a formal component of any certification schemes so far.

**The secretariat will remove the mention of offsets from the table and introduce this point in another fashion, while stating that some participants seriously disagree on the concept. As it looks like a very complex concept, which can be understood in very different fashion, additional information must be distributed among the**

**working group members before moving further on this discussion, which will hence remain open.**

#### *4. Discussion on Good Practices*

Where and how to mention good practices? Under each environmental principle separately (and consequently to have good practices in conservation, water, soil, air management, etc...)? Or compiled as a single and separated principle?

#### COMMENTS FROM PARTICIPANTS DURING AND AFTER THE CONFERENCE

- During the last virtual meeting, some comments were already made about the issue of where the idea of **promoting degraded land** would come in. So far, it is only to be mentioned in the best practices. However, there is a potential for a net benefit if one grows jatropha for example on degraded land. Although there are still a lot of studies to be held on that topic, should degraded lands be only included in the best practices or is there a place somewhere else for it in the criteria, so that it gets included as possibly the **first preference to bring in for biofuel production**, if one is able to identify a degraded land?
- **Positive guidance** could perhaps be included at the indicators level, because this is the point where the standards become more prescriptive in terms of what will be measured or monitored on the ground in order for someone to fulfill a particular criterion. And that would be directing someone to do something, not just to not do something.
- Perhaps **“marginal land”** would be more appropriate than “degraded land” and we should also integrate other good farming practices (0 tilling, conservation farming...) to be used on this land.
- The list of good practices is not yet exhaustive.
- The notion of having a piece of good practices under each principle sounds good, but we have to be very specific in what we understand as good practices.
- Nevertheless, some good practices may have involvement in several principles (positive effect on both biodiversity and water consumption for instance).
- Perhaps should we let the work go on about the other principles and in the other working groups and if we notice that some of the propositions of good practices are similar from one another, we can then open a general good practices principle. In addition to what, we can maintain the good practices that are specific for each issue. After the work of all the working groups is over, we can finalize this point.

- One must be careful. If you include degraded lands then one must define what "degraded" is. This requires a reference land use. For example: low biomass does not mean degraded. Deserts have low biomass but are not degraded and have conservation value.
- Some participants still feel uncomfortable about **the way crop rotation is mentioned in good practices**, as it is not enough to avoid large monocultures, which cannot be considered as sustainable. Something more specific, clearer should be stated. Good practice is not enough; crop rotation should rather come as an obligation, although it is not realistic for the RSB! Avoid monoculture must be mentioned somewhere as such.

**The Working Group agrees on having a piece of good practices under each principle, in addition to what, overlapping good practices can be compiled under a separate principle. Ultimately a single document gathering all the good practices to promote can be made.**

**The secretariat informs the participants that some recommendations are to be suggested to the Working Group on Implementation, including the need to promote global land use management at a national level. This would include a strong promotion of crop rotations. As there are so many technical terms we are to use in the standards, a set of definitions must be seriously worked on, not at the criteria level, but to be annexed to the standards.**

## *5. Wording of the Principle on Conservation*

The following suggestion was made by one of the participants:

*Biofuel production should avoid significant impacts on wildlife populations, or areas of High Conservation Value.*

Although the Expert Panel had not discussed that point, the secretariat found the suggestion interesting since it does not include the term “endanger”, which had been criticized. As a reminder, a consensus had already been reached to keep aspirational principles, while criteria would be worded in a realistic way.

### COMMENTS FROM PARTICIPANTS DURING THE CONFERENCE

- Keeping **“avoid” is problematic**; “minimize” would be more suitable. It is closer to what we are looking for.
- Some participants, however, tend to prefer **“avoid significant impacts”**, because it is stronger and clearer to state that we do not want the development of biofuels to damage biodiversity and “significant” is there, because there will always be some impacts on biodiversity. “Minimize” sounds like “do as little damages as you can”,

- but then, how much one is able to do depends on several criteria, whether it is the economic capacities or the willingness on the company. It is hence a slippery slope, with much subjectivity.
- “Biodiversity” is a more comprehensive and a clearer term than “wildlife”, with more references in international conventions. It should hence replace “wildlife” in the principle.
  - The working group first considered that biodiversity was already included in the HCV concept, while there was a concern that some wildlife species that are not considered as components of HCVs could be damaged by biofuel productions, what the RSB wants to avoid, even if these are common species.
  - **Biodiversity does not include “threatened or endangered species” only**, but all the diversity of life, including animals, plants, fungi, ecological processes, genetic diversity, etc... “Wildlife population” can be understood as animals only, as some previous debates already showed.

**The participants agree to replace “wildlife population” by “biodiversity”.**

- Some participants are in favor of replacing “significant” by “negative”, because “significant” is too controversial and a slippery slope as well.
- Originally, “significant” was added to show some **realism**, but negative and significant are not equivalent.
- Since this is an aspirational principle, perhaps can we simply say “should avoid negative impacts”, as using “should” (instead of “must”) is already a nuance.
- In addition to that, **the definitions list would include what the group understands as “impacts”**. This would not include negligible impacts of human activities for instance, but those involving a net loss of biodiversity. Hence it will make a clear criterion about what we want, which is actually to avoid impacts, in addition to what a definition will describe when an impact is big enough to be considered as an impact in the sense of the criterion.

**The group agrees on the wording: “Biofuel production should avoid negative impacts on biodiversity and areas of High Conservation Values.” The list of definitions to be annexed to the standards will include a clear definition of what the group understands as “impacts”, as per the principle.**

## ***6. Conclusions and next steps:***

- The coordinator has drafted an **“official” list of suggestions to be sent to the Implementation Working Group**, highlighting a certain number of aspects that will need to be explored. These aspects are: 1) to set objective parameters to differentiate between small and big producers and guidelines to help small

producers complying with the criteria; 2) the need to include biofuel production in a global land management plan including good practices, to be promoted at the governmental level; 3) the size of land to be kept aside as buffer zones and ecological corridors; 4) the share of responsibilities between governments and producers, particularly in identifying and mapping HCV areas.

**The draft letter will be sent to the WG members for consultation. Comments must be sent to [sebastien.have@epfl.ch](mailto:sebastien.have@epfl.ch) as soon as possible so that the letter will be finalized before the end of 2007.**

- As all the Expert Panel on Conservation members did not receive the draft synthesis on time, those who are not members of the Working Group are likely to **send their comments after this meeting**. A final version will be submitted to the working group before sending it to the Steering Board.
- The RSB received more and more calls to organize **in person meetings** and we take good note of this. A recommendation will be made to the Steering Board on that point, given that it appears as a quick and efficient way to move forward.
- One participant announced that after entering “biofuels, crop, production, standards and protocol” on google, RSB came first in the result page. It is also noticed that some outputs of the RSB have started being used by another organization, which is good news!

**The next Virtual Meeting of the Working Group (Biotechnologies) will be held in January 2008.**

**Thanks to all the participants; the secretariat wishes the RSB members a merry Christmas and a marvelous year 2008!**

Please keep on sending your views, comments and opinion to [sebastien.have@epfl.ch](mailto:sebastien.have@epfl.ch) or upload them on the **Bioenergy Wiki** ([http://www.bioenergywiki.net/index.php/RSB Working Group on Environment](http://www.bioenergywiki.net/index.php/RSB_Working_Group_on_Environment)) for an interactive debate!

**ANNEX: Synthesis Table on Conservation Criteria (2<sup>nd</sup> version)**

Criterion	Theme	Content	Status/Points of disagreement	Remarks
7.a	<b>Identification of production site</b>	<ul style="list-style-type: none"> <li>➤ <b>Responsibility</b> of the producer in the identification of HCV areas, Native ecosystems, ecological corridors and other biological conservation areas.</li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Consensus</b> on a distinction between <b>small and large farmers'</b> responsibilities.</li> <li>➤ Governments must be involved in a global mapping exercise but producers must provide data accordingly to their means.</li> <li>➤ The identification of surrounding areas poses the problem of land ownership.</li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>HCV areas defined as per the HCV network definition.</b></li> <li>➤ Timing of identification needs to be defined. Type of assessment not defined: quick EIA? LCA?</li> <li>➤ Support mechanisms to help producers must be discussed. Maybe in the IMP WG?</li> <li>➤ <b>Distinction between small/large producers</b> based on land areas or biofuel production capacities?</li> <li>➤ <b>Is a separate set of criteria, with appropriate wording needed for small producers?</b></li> </ul>
7.b	<b>HCV areas, native ecosystems, ecological corridors and other biological conservation areas</b>	<ul style="list-style-type: none"> <li>➤ <b>No conversion</b> of such areas.</li> <li>➤ Limited exploitation under appropriate management as long as HCVs are maintained.</li> <li>➤ Conversion of areas having lost their HCVs (degraded after a cut-off date) allowed.</li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Almost at consensus.</b></li> <li>➤ The group considers that HCV includes both terrestrial and marine ecosystems, including mangroves and peatlands.</li> <li>➤ <b>Debate:</b> This criterion might be too strict and <b>not workable from a business perspective.</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ Cut-off date to be established for use of former HCV areas, which have lost their HCVs.</li> <li>➤ Needs to define degraded lands somewhere in the standards</li> </ul>
7.c	<b>Ecosystem functions and services</b>	<ul style="list-style-type: none"> <li>➤ Avoid or minimise negative effects on EF and ES.</li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Consensus (Wording agreed).</b></li> <li>➤ Need to define what a producer would concretely have to do to achieve this (IMP WG?)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Ecosystem functions include ecosystem physico-chemical integrity, regeneration and succession; genetic, species, and ecosystem diversity; natural cycles</li> </ul>

				that affect the productivity of the ecosystem. Ecosystem services are the benefits obtained by people from ecosystems. These include provisioning, regulating, cultural and supporting services, as defined by the Millennium Ecosystem Assessment
7.d	<b>Buffer zones</b>	<ul style="list-style-type: none"> <li>➤ BZ must be set between production site and surrounding areas.</li> <li>➤ Riparian zones to be kept in a natural state</li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Consensus on the concept.</b></li> <li>➤ Definition of “natural” is problematic.</li> <li>➤ Guidance needed in terms of methodology and timing</li> </ul>	<ul style="list-style-type: none"> <li>➤ BZ not forcefully at the edge of each cluster, if part of a clustered production site</li> </ul>
7.e	<b>Ecological Corridors</b>	<ul style="list-style-type: none"> <li>➤ Avoid disruption.</li> <li>➤ If an EC is identified in the production site, it must be maintained in its original state.</li> <li>➤ In case habitat connectivity or wildlife movement is reduced, a significant area of the production site must be set aside.</li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Consensus on the concept.</b></li> <li>➤ Need to define a % of the area to be set aside.</li> <li>➤ To allow compensating through set aside land is contradictory with “avoiding disruption”.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Could BZ and EC be the same set-aside land?</li> </ul>
7.f	<b>Good practices</b>	<ul style="list-style-type: none"> <li>➤ Promote the use of degraded land, native species, crop rotation, global landscape management system, no-till practices, green harvesting (no</li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Consensus:</b> The group is in favour to have pieces of <b>good practices under each principle</b>, including conservation. Ultimately, a general principle could compile all the good practices related to a specific principle and those overlapping</li> </ul>	<ul style="list-style-type: none"> <li>➤ Point superficially discussed due to limited time.</li> <li>➤ Some participant would like crop rotation and use of degraded land to be promoted in a stronger fashion than just as a suggestion.</li> </ul>

		pre-harvesting burning), one-pass harvesting system.	between several principles. For example: the use of native species could have an effect on conservation and water management.	➤ All the good practices found by other groups could be ultimately compiled as a single document.
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**General comments:**

- A list of definitions of all the terms used in the principles and criteria will need to be annexed to the standards.
- According to some feedbacks we received, HCV areas cover everything including fragmented native ecosystems and all types of biological conservation areas. Hence, is it necessary to cite the latter in the wording?
- The HCV concept lacks mapped areas. Practical implementation of a standard requires that specific HCV areas be located areas may be difficult to map, unless we refer to national interpretation with the establishment of proxy criteria.
- Global Land-use management is to be promoted in the standards (Reference to CCBA standards)

**Point of debate:** Some participants would like the notion of **offsets** to be introduced when development in one or more of these areas is unavoidable. There should be some recognition of a compensation mechanism that under the circumstances of **unavoidable impact** to an area of HCV (once defined), and that the mitigation hierarchy has been applied (i.e. avoid, reduce, mitigate), can kick-in (e.g. like-for-like or like-for-unlike biodiversity offset). Several participants disagree with the idea to introduce offsets, as it could create loopholes regarding protection of HCV areas. It has been however agreed that, whenever this notion was to be introduced, **it should not be in the criteria, but rather at the implementation stage.**