

## Douglas Sheil – contribution to discussion, 18 January

What I want to say here is perhaps for the most part pretty obvious. But for me it has still taken time for all these issues to sink in. And I hope it may help others or trigger some useful ideas about how we handle the complexity that I shall describe.

Our methods in East Kalimantan tried to decipher the sometimes-complex relations and interdependencies that can exist between local people and their environment. Because we've taken a very broad and in some ways general approach we also begin to see how different aspects of the biota lead to different types of "values" or importance. For example, we see species used as products, but we also see species having importance as signifiers (this is a good place to cultivate rice as these plants show good soil), in providing services (both direct as in shade trees and indirect as in some community members recognised the value of bees and bats. And their habitats as allowing pollination and recovery of forest fallow), and some are valued for their existence (e.g. we might call these the sacred heritage and/or beauty aspects). Superimposed on the species level aspects there are also the location aspects and the values associated with those. Including special sites with special values for products (e.g. salt licks are good for hunting, some areas of forest are protected from clearance for the rattan or swifts nests), for services they provide (again salt springs might be an example) and then there are many special sites (e.g. grave sites etc).

When asking any stakeholder about the importance of species or sites they may consider very many factors. One of the most complicating factors on top of everything else is the multi-faceted issue of access. For some species or sites in real life to real people "value" depends on access (and on alternatives but I'll ignore that here). Access is a physical thing (distance, terrain, do you have a boat, is it heavy. Timber is easier to bring downstream than upstream etc.) and a social construct (can you use this site. What are the rules obligations and rights and (how) are they enforced?). In our site in Kalimantan it is this "access issue" that causes much uncertainty and difficulty in interpretation. Any questions about real value are coloured by these unknowns. How can people know how important something is to them if they are not sure it will be available to them any longer in a month or two? In some ways this could be taken as evidence that we need to elicit a more fully defined (though still abstract) statement of values (how important would this be if your rights to access it were maintained, or if .. etc.). Not easy to find the right hypothetical contexts or to ensure such (inevitably) more complex they are adequately expressed into local languages (or as most often in our cases through a shared non-first language) so as to be understood. Perhaps building more limited choices of complete future scenarios provides one pathway that we could take - any comments? This also has the benefit of ensuring that statements of choices and preference are built into a more complete view of "real" choices where we elaborate the wider world in which the choice needs to be made.

[Though not central to the issue of assessment it is nonetheless crucial to note also that the uncertainty I refer to, where rights and claims of legitimacy overlap and conflict, leads to a "tragedy of the commons type" free-for-all...]