

ID	Reviewer Name	Country of residence	Affiliation	Government Representative	Chapter	From Page (start)	From Line (Start)	To Page (End)	To Line (End)	Comment	Answer
17	Bob Watson	United Kingdom	N/A	No	Ch. 3	General				In my opinion the most important chapter in the whole report is chapter 3. In the IPBES preliminary guide we outlined the importance of the diverse conceptualization of values, thus recognizing diverse world views, and we outlined the different approaches to valuation using different techniques, but what was missing was a critical assessment of the techniques themselves, e.g., do contingent valuation techniques provide useful values or is the technique flawed. In my opinion Governments and other actors will expect to see a critical assessment of the strengths and weaknesses of all valuation techniques for instrumental and relational values, a critical discussion of the commensurability (or lack there-of) of values, an assessment of data availability (or lack there-of) in different parts of the world to do valuation studies, the challenges of valuation for different types of ES/NCP, spatial scales, issues association with double counting among ecosystem services/NCP, the difference between individual and shared values (and whether shared values are necessarily more legitimate than individual values), , and numerous other key issues, which do not seem to be listed in the skeleton outline of the key findings of chapter 3 (these issues may be discussed in depth in the chapter but the key findings do not seem to address these issues).	We agree and performed changes in accordance to the reviewer suggestion. The new structure of the chapter hopefully makes this clearer.
88	Arfanuzzaman	Bangladesh	Organization (FAO) of the United Nations	No	Ch. 3	33.	652	33	652	Also show the growth of valuation paper per year	Figure 3.5 shows the growth of papers over time.
151	Kris Wyckhuys	Vietnam	Chrysalis consulting	No	Ch. 3	1.	3	1	6	I am very encouraged by this chapter & the authors' active pursuit of interdisciplinary approaches for nature's value assessment. In order to effectively communicate the importance of nature to societal wellbeing, it is not only essential to quantify its monetary contributions but also to express it in other 'currencies'. Initial efforts to quantify the contribution of biological pest control to commodity market stabilization & human demographics can be found in Wyckhuys et al., 2018 Environmental Research Letters and Wyckhuys et al., 2019 BioRxiv.	Thank you for your comment. We have coded "currency" in the review of valuation applications. The results can be found in section 3.4. Finding number 3.
163	Michael Bordt	Canada	None (Member of SEEA EEA Technical Expert Committee and Editorial Board)	No	Ch. 3	64	1289	64	1289	I don't see where in the chapter issues of different methodologies for market valuation are addressed. Many studies do not distinguish between production values (contribution of ecosystems to value of crops) and welfare (the nutrition/health offered by the crops). Both are generally within the realm of "monetary valuation", but work on the SEEA is trying to ensure these two scopes are distinguished.	Thank you for your feedback. We follow the IPBES value target typology which distinguish between the target for the valuation activity. Furthermore, we distinguish between valuation methodologies. Both typologies will characterise how individual aspects of nature can be assessed using explicit valuation methods.
189	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	4	80	4	80	Specify "subjective" to what.	This paragraph has been edited.
190	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	2	33	2	33	It is important to clarify that different methods and their applicability might be context-dependent, for instance associated with the ecosystems involved in the valuation	We agree and performed changes in accordance to the reviewer suggestion.
191	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	5	97	5	97	For the purposes of the chapter a clear definition of valuation would be very useful. The definition in Table 3.1. is more oriented to show the goal of valuation but it is not a definition itself	Definition has been added "We define valuation as the application of methods and approaches to recognize values of nature and/or human-nature relationships, with the aim to make them explicit and enable their inclusion in decision-making."
192	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	6	135	6	140	One of the questions to be answered here is: Which methods are suitable for which groups? Some methods adjust better to local communities while others are more oriented to other types of stakeholders	You are right that this specific question is not among the 6 questions that guide the main core of the chapter. The issue of which methods for what contexts is not so easy to answer, however. We find that, methods are substantially versatile and flexible to different contexts (from one on one interviews to local community workshops). See section 3.4 (Findings) where we discuss the versatility of methods to different contexts.
193	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	8	199	8	199	Hanemann (1992) is not in references section	Thanks for the valuable feedback, this reference is now included on the references section.
194	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	8	200	8	200	Ciriacy-Wantrup (1947) is not in references section	Thanks for the valuable feedback, this reference is now included on the references section.
195	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	8	191	8	194	Hedonic methods has been also used to value other environmental services such as landscape and air pollution	We appreciate your valuable comment this has been addressed in the text as the absence of natural dis-amenities.
196	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	8	194	8	196	"However" seems to be an inadequate conector	Thank you for your comment, the text was adapted

197	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	8	197	8	198	It is important to highlight that observing behavior in markets can only capture use values	This is discussed in section 3.3.1.3 Method family 3: behaviour based valuation
198	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	8	198	8	201	Check writing	Thank you for your suggestion, the text was adapted
199	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	9	206	9	224	It would read better if it starts with the description of stated preferences methods and then highlight their limitations	This is discussed in depth in the section 3.3.1.2. Method family 2: statement based valuation
200	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	9	210	9	214	There is an important body of literature showing how to minimize hypothetical bias. The paragraph suggests that this is an unsolved issue. See for example Louviere, J., Hensher, D., Swait, J. 2001. Stated Choice Methods: Analysis and Applications.	text was adapted and the thematic section 3.3.4.1 address this topic.
201	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	9	213	9	214	Hausman (2012) and Loomis (2011) are not in references section	Thank you for your feedback. The text has been rewritten and a more extensive section is included (3.3.4.1) including both work of Hausman and Loomis.
202	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	9	219	9	222	Non use value include not only existence values but also option values	This has been included in section 3.3.1.2
203	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	10	236	10	236	In the definition of production approaches, I suggest to clarify that they are "services values that are assigned from the impacts of those services as INPUTS on economic outputs"	Thank you for the comment. Please see table 3.5
204	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	10	236	10	236	In this Table it is mentioned the Cost-based Approaches; however they are not mentioned in the text. In addition, somewhere in the chapter 3, it should be explained that Replacement cost methods should be used with caution given the fact that they actually do not elicit individual preferences.	Thank you for the comment. There is now text in section 3.3.1.3 that speaks to cost-based methods and a warning is given there and in Section 3.4 (Findings) about the limitations of such methods.
205	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	10	236	10	236	Valuation of attributes of environmental services includes -besides Conjoint Analysis- Choice experiments; they are two different methods. Brown (2003 in Champ et al., 2003) argues that stated preferences approaches include: contingent valuation, attribute-based methods (such as choice experiment), and pair comparison (including conjoint analysis)	Thanks for the feedback. See Annex 3.1. Examples of statement-based valuation methods. Both have been included in the assessment.
206	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	11	246	11	246	Boyce et al. (2019) is not in references section	Noted, thanks,.
207	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	11	250	11	250	Train (2009) is not in references section	Noted, thanks,.
208	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	8		8		For this section (History of valuation) I suggest to review the book "Contingent Valuation: A Comprehensive Bibliography and History" (Carson, 2012)	Thanks for the suggestion. This review of contingent valuation is included alongside other stated preference methods in section 3.3.1
209	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	12	273	12	273	Change "Critiqued" for "Criticized"	Thanks for the suggestion, however this has probably changed due to edits in the text.
210	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	11	256	11	256	In the section Unresolved concerns and ongoing debates, there is another issue that might be worth to mention: an important challenge is how to obtain better estimates about the change in the flow of ecosystem services as a result of changes in the structure and functioning of ecosystems (ecological production functions).	Accepted edit. Please see section 3.3.1.1 which discusses the challenges of different nature-based valuation methods, including that of obtaining estimates in a dynamic world.
211	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	13	318	13	318	Costanza (1980) is not in references section	Reference is no longer cited in text
212	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	13	336	13	336	Barbier (2016) and Vo et al. (2012) are not in references section	Thank you for your comment, references are now included.
213	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	14	345	14	345	NEA (2014) is not in references section	Thank you for your comment, references are now included.
214	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	14	347	14	347	IPBES citations should be ordered	The mentioned studies have been now added and the section modified. We thank the reviewer for this comment.
215	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	25	616	25	616	i. it is not clear why travel cost methods are outside of economic methods, ii. economic methods could be divided into stated preference methods, reveal preference methods and cost based methods, and iii. another set of tools that have been used for valuation are: economic experimental games, role games and mental maps Cardenas et al (2012). Fee for example: http://www.humboldt.org.co/es/component/k2/item/100-metodos-complementarios-para-la-valoracion-de-la-biodiversidad-una-aproximacion-interdisciplinar	Thank you for your feedback. Please see table 3.3. Correspondence of review topics and their criteria to the six Chapter 3 Assessment Questions
216	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	28	667	29	668	other relevant sources of information about valuation studies include the web pages of Conservation Strategy Fund (CSF), Latin American and Caribbean Environmental Economics Program (LACEEP), Environment for Development Initiative (EfD) and Resources for the Future (RFF)	The systematic review has focused on published scientific literature. Thematic and method family reviews have included some grey literature and online repositories. This will be further verified and amended, thanks for these suggestions
217	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	37	880	37	895	It is important not only identify if valuation studies incorporate IPLC but also to consider whether valuation studies encourage/support policy-making decisions or actions that negatively affect IPLC. Do we need and indication for this?	The question of whether valuation studies support decision making that leads to positive or negative outcomes in IPLC is beyond the scope of Ch 3. The uptake of valuation findings is addressed in Ch 4
218	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	44	978	44	985	Economic theory supports the idea that estimates of willingness to pay from valuation are the maximum. SO it might seem misleading to emphasize on The maximum WTP for this indicator	We appreciate your comment, text has changed.

219	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	45	1017	45	1017	Descriptions of indicators for Distributional equity suggest they are measuring heterogeneity instead of equity; particularly the verifier named Disaggregation by groups	Thanks for the excellent comment. Box 3.2 addresses this issue in detail.
220	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	47	1058	47	1063	Some individual methods, such as contingent valuation, include in the design the discussion about consensus as part of the scenario being valued. However, the paragraph suggest that this indicator only applies to collective approaches.	We appreciate your comment, the structure of the chapter has now changed including four method families, contingent valuation is now listed under the Statement based valuation methods, and identified as individual based.
221	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	51	1144	51	1148	It is likely that the lack of matching between NCP18 and valuation studies is generated because studies have been supported on the ecosystem services approach. Maybe the value assessmet should consider this approach first and then to match findings with NCP approach.	Thanks for your comments, the approach used changed.
222	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	64	1427	66	1482	The findings for AQ3 and AQ4 could be enriched if presented crossing results from both questions. For example some studies can be more suitable for some ecosystems or for some human populations or for some NCP, or for some time horizons.	We have verified the application of method types versus various contextual factors, see 3.4
223	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	General				The methods have evolved over time making them suitable for some conditions/contexts as they are refined. This historical evolutions could be considered in the discussion about feasibility of their application	Thanks for the suggestion. The refinement of methodologies is now both described in the history of valuation but also in thematic reviews 3.3.4
224	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	73	1616	73	1617	Arrow et al. (1993) is not cited in the main text	The mentioned studies have been now added and the section modified. We thank the reviewer for this comment.
225	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	75	1671	75	1672	Bhagwat (2009) is not cited in the main text	Thank you for your valuable feedback, this reference is no longer mentioned in the chapter
226	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	75	1659	75	1661	Reference is in capital letter, correct.	Thank you for your valuable feedback, this has been corrected
227	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	76	1715	77	1731	Castro et al references should be ordered by year of publication	Thank you for your valuable feedback, this will be taken into consideration for the final edit of the report where format will be done based on IPBES guidelines.
228	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	79	1817	79	1824	Garcia-Llorente et al references: both of them are from 2012: include a. and b. to diffrentiate themm	Thank you for your suggestion, references were adapted.
229	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	81	1898	82	1904	lbpes references (2016 b and 2018a) are not in main text	Thank you for your valuable feedback this refernces are now included in the main text.
230	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	85	2016	85	2017	Names of authors are in capital letters; correct	Noted
231	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	87	2086	87	2088	Obst et al. (2016) is repeated	Thank you for your valuable feedback this has been corrected
232	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	88	2122	88	2124	Pandit et al. (2015) is not in main text	This reference is no longer included on the text nor references
233	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	89	2160	89	2170	Quintas-Soriano references should be ordered by year	Thank you for your valuable feedback, this will be taken into consideration for the final edit of the report where format will be done based on IPBES guidelines.
234	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	91	2240	91	2243	Subroy et al. (2018) is not in main text	This reference is no longer included on the text nor references
235	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	94	2316	94	2316	Villa et al. (2009) is not in references section	Thank you for your valuable feedback, this will be taken into consideration for the final edit where all citations will be mentioned in the references section.
236	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	97		97		Castelgno et al. (2013) is not in references section	Thank you for your valuable feedback, this will be taken into consideration for the final edit where all citations will be mentioned in the references section.
237	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	general				have you considered to include national indexed literature?	The systematic review has focused on published scientific literature. Thematic and method family reviews have included some grey iterature and online repositories. This will be further verified and amended, thanks for these suggestions

238	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	94	2316	94	2316	Annex 3.1.1. The economic method is an economic method, ii. The examples of citations for each of methods could be improved and completed, iii. neuro-economic-based environmental valuation is an economic methods, iv. For participatory economic valuation methods you could include studies from: Lynam, T. (1999). Adaptive analysis of locally complex systems in a globally complex world. Conservation Ecology, 3 (2), 13. [online]. http://www.consecol.org/vol3/iss2/art13/ ; Lynam, T. (2001). Participatory systems analysis: An introductory guide (IES Special Report 22). Bogor, Indonesia: Institute of Environmental Sciences (IES)/University of Zimbabwe/Center for International Forestry Research (CIFOR); Lynam, T. (2003). Scientific measurement and villagers' knowledge: an integrative multi-agent model from the semi-arid areas of Zimbabwe. En M. Janssen & M. Janssen (Eds.), Complexity and ecosystem management: The theory and practice of multi-agent systems (pp. 188-217). Cheltenham, UK: Edward Elgar; Lynam, T., De Jong, W., Sheil, D., Kusumanto, T. & Evans, K. (2007). A review of tools for incorporating community knowledge, preferences, and values into decision making in natural resources management. Ecology and Society, 12 (1), 5. [online]. http://www.consecol.org/vol12/iss1/art5/ ; Sheil, D. & Liswanti, N. (2006). Scoring the importance of tropical forest landscapes with local people: Patterns and insight. Environmental Management, 38, 126-136. Sheil, D., Liswanti, N., van Heist, M., Basuki, I., Syaefuddin, I., Samsudin, I. et al. (2003). Local priorities and biodiversity in tropical forest landscapes: Asking people what matters. Bogor, Indonesia: Center for International Forestry Research (CIFOR); Sheil, D., Puri, R., Basuki, I., van Heist, M., Rukmiyati, S., Sardjono, M. et al. (2002). Exploring biological diversity, environment and local people's perspectives in forest landscapes. Bogor, Indonesia: Center for	This has been amended. See section 3.3.1.1-3.3.1.4 for the overview of different types of methods and key references.
239	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	97		97		Revealed preferences corresponds to economic methods	This has been amended. See section 3.3.1.3 Method family 3: behaviour-based valuation
240	Rocio Moreno-Sánchez	Colombia	Conservation Strategic Fund	No	Ch. 3	98		98		i. Stated preferences corresponds to economic methods not to modelling methods; ii. there other many references that can be used here	This has been amended. See section 3.3.1.2 Method family 2: statement-based valuation
246	Miles Richardson	United Kingdom	University of Derby, Nature Connectedness Research Group	No	Ch. 3	32.	768	32	770	The Principle of Harmony and Balance with Mother Earth relates very well to nature connectedness and the psychometric scales used to measure it. Therefore nature connectedness provides a useful criterion and its measures provide useful indicators, with a recent measure designed for population use informing the UK Government's updated Monitor of Engagement with Natural Environments, Richardson, et al. (2019). A Measure of Nature Connectedness for Children and Adults: Validation, Performance, and Insights. Sustainability, 11(12), 3250.	Thanks for these relevant suggestions. These concepts were not taken up in the systematic review directly, but we will consider these towards the final version
247	Miles Richardson	United Kingdom	University of Derby, Nature Connectedness Research Group	No	Ch. 3	51.	1340	51	1341	Nature connectedness relates to the verifiers 'Living well in harmony with nature', 'Identity and Autonomy', 'Spirituality and Religions' and depending on the scale used can measure these. All scales cover living in harmony with nature, aspects of identity are covered and some scales include spirituality. Further, there are behavioural scales that can be used to further assess living in harmony, for example the many pro-environmental scales (which broadly focus on carbon reduction), but more importantly the first pro-nature conservation scale focussed on land and civil actions related to nature conservation has been developed in 2019. This has been found to relate to quality of life and nature connectedness explains the largest proportion of variance in it. Further 2019 research shows that pro-environmental and pro-nature conservation behaviours are different 'factors' and types of behaviours.	This section has been completely re-written and no longer makes reference to nature connectness. Rather, the life frames of Living In, Living with, Living As and Living From introduced in Chapter 2 are used.
248	Miles Richardson	United Kingdom	University of Derby, Nature Connectedness Research Group	No	Ch. 3	63.	1388	63	1388	There are quantitative measure of more holistic wellbeing (e.g. see systematic review of Pritchard et al 2019) and quality of life (including ReQoL which includes an economic valuation) and harmony/nature connectedness has been found to explain increases in ReQoL in the Improving Wellbeing through Urban Nature (IWUN) project - £1.3m Valuing Nature project in the UK - McEwan, K., Richardson, M., Brindley, P., Sheffield, D. & Ferguson, F.J. A Smartphone App for Improving Mental Health through Urban Nature. (2019). International Journal of Environmental Research and Public Health, 16(18), 3373 doi.org/10.3390/ijerph16183373 .	Thanks for these relevant suggestions. These concepts were not taken up in the systematic review directly, but we will consider these towards the final version

432	Syed H. Raza	Malaysia	Media Project on Conservation Environment & Nature MPCEN	No	Ch. 3	36	884	37	860	Regarding to Grey literature & academic publication more appropriate is to create a regional division. So Grey literature published by an organization in South East Asia or Academic literature by any research institute in South East Asia best can easily help create focus on South east Asia rather having a global approach. Not all the organizations cover the whole globe so divide them based on regions.	Thank you for your feedback. We have used the IPBES regions as the geographical regions in the review. This has been done through geocoding of the country names from abstracts, key words and titles. We have not systematically divided sources from organisations into geographical groups, as our reviews of valuation applications have used peer reviewed sources.
439	Jasper Meya	German	German Center for Integrative Biodiversity Research (iDiv) and Department of Economics, University of Leipzig	No	Ch. 3	12	302	12	304	I suggest to insert at the end of the sentence „and the development of economic approaches to account for limited substitutability in sustainability policy and project appraisal (Drupp 2018; Baumgärtner et al. 2017)“ ; References: Drupp, M. A. (2018). Limits to substitution between ecosystem services and manufactured goods and implications for social discounting. Environmental and resource economics, 69(1), 135-158. Baumgärtner, S., Drupp, M. A., & Quaas, M. F. (2017). Subsistence, substitutability and sustainability in consumption. Environmental and Resource Economics, 67(1), 47-66.	This text is no longer in the chapter
440	Jasper Meya	German	German Center for Integrative Biodiversity Research (iDiv) and Department of Economics, University of Leipzig	No	Ch. 3	94	2316	98	2317	I suggest to reference in table 3.17 “List of methods” (row: valuation method: Benefit Transfer”) statistical as well as theory-driven (“structural”) approaches to benefit transfer. Structural approaches to benefit transfer, guarantee a basic level of logical consistency (such as adding-up consistency), that is often violated in approaches purely based on statistical fit (Newbold 2018). Convergent validity analyses suggest, that in particular adjusting for mean income using a simple formula (ratio of mean income levels to the power of the income elasticity of WTP) reduces transfer errors (Czajkowski et al. 2017; Meya et al. 2018). Such formulas for structural benefit transfer can be derived from ecologic-economic modelling (Smith et al. 2002, Baumgärtner et al. 2017). References: Baumgärtner, S., ..., and M.F. Quaas (2017), Income inequality and willingness to pay for environmental public goods. Journal of Environmental Economics and Management, 85: 35–61. Czajkowski, M., Ahtiainen, H., Artell, J., & Meyerhoff, J. (2017). Choosing a functional form for an international benefit transfer: Evidence from a nine-country valuation experiment. Ecological Economics, 134, 104-113. Smith, V.K., Van Houtven, G., and Pattanayak, S.K. (2002), Benefit transfer via preference calibration: „Prudential algebra” for policy. Land Economics, 78(1), 132–152. Newbold, S.C., Walsh, P.J., Massey, D.M., and Hewitt, J. (2018), Using structural restrictions to achieve theoretical consistency in benefit transfers. Environmental and Resource Economics, 69(3), 529–553. Meya, J.N., Drupp, M.A., and Hanley, N. (2018), Income inequality and the international transfer of environmental values. Kiel Economics Working Paper, No. 2017-02. <i>Unpublished working paper</i> .	A section specifically on Benefit Transfers has now been included which discuss different transfer approaches - see 3.3.4.4
441	Jasper Meya	German	German Center for Integrative Biodiversity Research (iDiv) and Department of Economics, University of Leipzig	No	Ch. 3	94	2316	98	2317	In Table 3.17 “List of methods” (row “Insurance Values”): Additional, more recent publications on the insurance value of biodiversity and ecosystem services are Augeraud-Véron, E., Fabbri, G., & Schubert, K. (2019). The value of biodiversity as an insurance device. American Journal of Agricultural Economics, 101(4), 1068-1081. Baumgärtner, S., Strunz, S. (2014). The economic insurance value of ecosystem resilience. Ecological Economics, 101, 21-32. Quaas, M.F. and S. Baumgärtner and M. De Lara (2019), Insurance value of natural capital, Ecological Economics, 165, 106388. Quaas, M. F., & Baumgärtner, S. (2008), Natural vs. financial insurance in the management of public-good ecosystems. Ecological Economics, 65(2), 397-406.	The list of methods has been revised substantially.
447	Alastair Johnson	United Kingdom	Department for Environment, Food and	No	Ch. 3	11	106	11	109	Valuation also contributes towards prioritising and decision making.	Absolutely. The new structure of the chapter hopefully makes this clearer.
448	Alastair Johnson	United Kingdom	Department for Environment, Food and	No	Ch. 3	14	203			Should read "...economists..."	Thank you for your suggestion, the text was adapted
449	Alastair Johnson	United Kingdom	Department for Environment, Food and	No	Ch. 3	15	220			Should read "...no physical contact..."	text was adapted

450	Alastair Johnson	United Kingdom	Department for Environment, Food and Rural Affairs (Defra)	No		15	221			"These values have also been called existence value". I don't think this is correct. Existence value is one type of non-use value. Others include intrinsic value, bequest value, and sometimes option value. IPBES will also be interested in the latest standard 'Monetary valuation of environmental impacts and related environmental aspects' published on 13 March 2019 - see https://committee.iso.org/sites/tc207sc1/home/news/content-left-area/news-and-updates/iso-140082019-has-now-been-publi.html	Please see page 24 of the Guidance document.
451	Alastair Johnson	United Kingdom	Department for Environment, Food and	No	Ch. 3	16	235			End of Table 3.2 - What about Multi-Criteria Analysis?	This table has been removed.
452	Alastair Johnson	United Kingdom	Department for Environment, Food and Rural Affairs (Defra)	No	Ch. 3	17	256			A key point must be that economics doesn't provide the answer, but rather informs the debate just as must as, for example, science or legal aspects do.	Thank you for your feedback. Yes - your point reflects the approach taken in the chapter. We define valuation as an activity to enable decision making.
453	Alastair Johnson	United Kingdom	Department for Environment, Food and	No	Ch. 3	17	264	17	265	'commensurable' means measurement by the same standard, so this last phrase is not needed.	Noted. The text will be adapted in the final version of the chapter
454	Alastair Johnson	United Kingdom	Department for Environment, Food and	No	Ch. 3	18	299	18	301	What about also the use of the Precautionary Principle?	We respectfully disagree that this is in the scope of this section
455	Alastair Johnson	United Kingdom	Department for Environment, Food and Rural Affairs (Defra)	No	Ch. 3	25	483			Table 3.3, Row 5 "Assess bias in included studies" - Is the assumption that the studies have been quality assured, or should there be an assessment of the methodology and results?	We conduct a broad PCIV review now, which as part of its criteria looks into validity processes when mentioned in the literature.
504	Dolores Amelia Arreguín Prado	Mexico	Latin America Youth Biodiversity Network Mexico	No	Ch. 3					What kind of evidence can be used to make visible the decisions and implicit values within organized crime and illegality spots?	Not the focus of the document.
505	Dolores Amelia Arreguín Prado	Mexico	Latin America Youth Biodiversity Network Mexico	No	Ch. 3					Some document that could be used as source of non-scientific information might be the public consultation data, public assembly acts (consider a broad spectrum of the processes to make decisions).	The systematic review has focused on published scientific literature. Thematic and method family reviews have included some grey literature and online repositories. This will be further verified and amended, thanks for these suggestions
523	Rafael Calderón Contreras	Mexico	Licenciatura en Estudios Socioterritoriales, Universidad Autónoma Metropolitana, Unidad	No	Ch. 3					Make a distinction about the non-economic and the economic valuation methods.	We have provided a full description of the classification used and how it links to other classifications. The main description of the classification can be found in 3.3.1 State of the art on valuation methods and the sub-sections within.
524	Rafael Calderón Contreras	Mexico	Licenciatura en Estudios Socioterritoriales, Universidad Autónoma Metropolitana, Unidad	No	Ch. 3					Distinguish the environmental valuation from nature valuation.	We no longer make reference to environmental valuation in the SOD
561	Raquel Jiménez Acosta	Mexico	Reforestamos Mexico A.C.	No	Ch. 3					How well represented is the non-economic valuation?	We no longer refer to economic and non-economic valuation, but in sections 3.3 (Valuation of nature- state of the art) and 3.4 (Findings) we present the results from the systematic review of the literature on valuation applications and discuss the prevalence of the methods families.
562	Raquel Jiménez Acosta	Mexico	Reforestamos Mexico A.C.	No	Ch. 3					106 methods have been identified (from scientific information only), it would be convenient to detect the gaps to help promote the research from other disciplines and also to consider non-scientific information.	This has been amended (List of methods in Appendix 2.)
587	Mónica V. Alegre González	Mexico	CONABIO	No	Ch. 3					It is important to make the process and results from the valuation transparent. Diffusion should be simple and clear, if possible, making the association to common real life cases, this way it may be appropriated by the decision maker.	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
588	Mónica V. Alegre González	Mexico	CONABIO	No	Ch. 3					Results from this assessment should be shown as a dynamic process, something that evolves.	We are trying to tackle this through the theory of change in Chapter 1 and also Ch. 2 highlights the dynamic process of values.
589	Mónica V. Alegre González	Mexico	CONABIO	No	Ch. 3					Could it be possible to associate a couple of social problems to the influence they have in the diverse valuation methods already identified?	This goes beyond the scope of Ch 3.
611	Jasmin Hundorf	Mexico	Coordinator bei Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 3					Invite much more decision makers, ask them what is it they would need to use the assessment for, what do they propose for the process, turn it into a demand-driven process.	Thanks for this thoughtful suggestion. The review of the SOD is the opportunity for Governments to comment on the assessment and how it meets the requests.
612	Jasmin Hundorf	Mexico	Coordinator bei Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 3					Create the link between the science and the practical use of it.	Thanks for the valuable feedback. This is exactly what we do by reviewing both the state of the art and the valuation practice.
620	Lizzeth Moreno	Mexico	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 3					The term "non-human" can easily become a discriminatory term. Be careful when you use it (for example, during a while, some aboriginal groups were denominated "non-human"). Find a term that will communicate the message in a clearer manner.	Thank you for the suggestion. This term is currently used across the assessment to refer to living and non-living entities like mountains, rivers, fishes etc. and does not refer to any human community, we understand your concern and will discuss this point with the other chapters.

626	Lucía O. Almeida Leñero	Mexico	Ecology and Natural Resources Department,	No	Ch. 3					The potential use and application of valuation methods for decision-making needs to be well explained (schematically).	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
642	Rafael Calderon Contreras	Mexico	Licenciatura en Estudios Socioterritoriales, Universidad Autónoma Metropolitana, Unidad	No	Ch. 3					The four methods approaches in the analysis diagram (economic, biophysical...) do not shape the chapter, nor do they operationalise the Chapter's methods.	We agree and performed changes in accordance to the reviewer suggestion.
663	Adriana Carolina Flores Díaz	Mexico	CENTRUS, Universidad Iberoamericana	No	Ch. 3					Not all valuation methods give the same voice to all authors. We need to study each valuation method in a given context, and compare the vision of the method to how it's been applied.	We agree. When describing some of the limitations of methods in section 3.3.1 we make reference to the power issues that must be managed and navigated in some of the methods to ensure equal voice is given to all.
675	Melanie Kolb	Mexico	Geography Institute, UNAM	No	Ch. 3					For the classification of methods, you could generate categories with 2 criteria: type of values; and type of methods. That is to say, you can assess the methods based on their objective (type of values) and their inputs (the methods they use).	Thanks for the valuable feedback. Hopefully the revised classifications we use through-out the assessment makes this clear how the individual methods and information they use relate to the classification.
684	Patricia Koleff	Mexico	CONABIO	No	Ch. 3					The general objective needs to be more explicitly stated, so that the review of methods can be congruent to the general objective.	Section 3.1 (Introduction) outlines the objective of the chapter.
685	Patricia Koleff	Mexico	CONABIO	No	Ch. 3					It is important to not only have a diagnosis (meta-analysis) but also to conclude with recommendations (orientation).	Section 3.5 (Future outlook for valuation) aims to address this point as best as possible.
686	Patricia Koleff	Mexico	CONABIO	No	Ch. 3					It is still unclear how distinct approaches of valuation (for instance, biophysical, economic, social) can be integrated to be helpful to decision makers.	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
687	Patricia Koleff	Mexico	CONABIO	No	Ch. 3					Valuation methods (and their outcomes) can serve as input for different policy-support tools (for instance, environmental impact assessment). It would be interesting to define those policy-support tools (or decision-making tools) and make a systematic inventory of which valuation methods can be helpful for which policy-support tools. This can help identify gaps in the breadth of valuation methods: if no valuation method exist to address specific policy-support tools or types of decision-making, this should be clearly stated.	This comment is pertinent for chapter 4.
707	María Azahara Mesa	Mexico	Sustainability Sciences Department, Colegio de la Frontera Sur, Mexico	No	Ch. 3					The chapter can become a compilation of methods than can be confusing and non-operative. How will the reader know which method to use, based on the decision to be taken? How can we combine or interpret the different units of expression of values?	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
733	María Perevochtchikova	Mexico	CEDUA, COLMEX	No	Ch. 3					Chapters 2, 3, and 5 have the same problematic bias: Chap 2 has a bias towards an occidental vision. Ch3 has a big presence of enomic valuation methods compared to other methods. Ch5 talks about "the green economy".	Thank you for your feedback. We respectfully disagree. Chapter 3 is reviewing a wide range of valuation approaches from different disciplinary perspectives and include IPLC approaches
753	Sandra Solís	Mexico	CONABIO	No	Ch. 3					I recommend to read the following book for the theme of restauration and rehabilitation of ecosystems - it can be used as a guide to determine valuation methods: "La restauración de los ecosistemas terrestres en México: Estado actual, necesidades y oportunidades".	Thank you for the recommendation. We do not address restoration per se in the Chapter
763	Tania Alhelí Cruz Mejía	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3					Will the chapter have a limit of the classification categories for valuation methods?	Thank you for your feedback. Please see section 3.2.1 explains the classification used
764	Tania Alhelí Cruz Mejía	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3					Will the proposed categories of valuation methods (economic, social, biophysical...) be broadened because they are generic o because there are stakeholders not fully convinced with them?	Thank you for your feedback. Please see section 3.2.1 explains the classification used, the reason for using it and how it relates to other classifications.
770	Fernando Estañol Tecuatl	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3					I suggest the pernicious limits and consequences of the market fetichism (sensu Marx) are carefully reviewed since there are specific valuation approaches that are based in the neoclassical dogma.	Thank you for your feedback. We have revised methods from a broad range of rationales from market logic to biocentric.
771	Fernando Estañol Tecuatl	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3					When it comes to systematically link the valuation aproches with their applications, I suggest to highlight the potential that the different valuation aproches have to contribute to non-market based economic systems, such as small communal systems or the state-planned economy.	Thanks for the valuable feedback. We have assessed valuations in different social scales and contexts, see section 3.2.3.
773	Eduardo García Frapolli	Mexico	Ecological Economy Laboratory, IIES, UNAM	No	Ch. 3					It is clear how adult population is represented within the process and the valuation methods, how is it thought to incorporate the values of kids, independent from the worldviews?	Thanks for this valuable comment. Unfortunately at this late stage and given the available expertise we cannot delve very deeply into this matter.
774	Eduardo García Frapolli	Mexico	Ecological Economy Laboratory, IIES, UNAM	No	Ch. 3					Considering that ahuros of the asesmnt hold values implicitly, how to avoid value bias when approaching valuation methodologies?	This is a very interesting and critical comment. We are only human. However the draft has gone through several rounds of internal peer review and one round of external peer review where we received 2048 comments. Such comments help reduce bias and keep us grounded.

775	Eduardo García Frapolli	Mexico	Ecological Economy Laboratory, IIES, UNAM	No	Ch. 3						How do you plan to encompass and document the different values and valuation approaches from groups that are not represented within IPBES?	This is a very interesting and critical comment. We have included 26 ILK experts as contributing authors to expand our perspective on IPLC methods and approaches. The method families framework that we use to group similar methods is developed on the premise that valuation is informed by many disciplines and that it is undertaken differently depending on schools of thought and epistemologies. We believe we the SOD now demonstrate a true diverse array of methods that represent multiple way of thinking about valuation and how it is conducted.
776	Eduardo García Frapolli	Mexico	Ecological Economy Laboratory, IIES, UNAM	No	Ch. 3						Looking at the structure of IPBES, it seems that the logical result from the assessment of methods will follow a western 'inclusive' approach. How to avoid that result and go beyond that?	We are not sure what you mean by "western inclusive approach"
783	Ariana García Galván	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						About the categorization of the valuation methods, I consider that interdisciplinary groups could analyze the features of the different methods and come up with more integrative categories of classification instead of (economic, biophysical, social..)	Thank you for your feedback. We believe that we have now presented a much more inter- and cross-disciplinary classification scheme for the methods. See sections 3.1.3 and 3.3.1 to understand the idea of Methods Families.
792	Salma Citlali Martínez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						Are there any parameters on factibility and robustness for the valuation methods? What is sustaining those parameters?	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
793	Salma Citlali Martínez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						Besides searching for valuation methods and proposing their use for specific cases, does this chapter considers the ease for decision makers to use them?	This comment is pertinent for chapter 4.
794	Salma Citlali Martínez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						Will there be a suggestion of different methods per case or is it going to be one method per case?	Different methods per case have been considered. Please see section 3.4 (Findings).
798	Óscar Armando Ugartechea Salmerón	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						Once the valuation methods are classified, will they also be classified within an application scale? Do you have in mind the mechanisms to communicate better practices in diverse contexts?	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
802	Andrea Velásquez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						It seems to me a transcendent effort to generate valuation methods for the articulation of values, especially aimed at helping decision makers and policy makers. This will apparently result in a fairer landscape.	Thanks!
803	Andrea Velásquez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						How will the values of the nature of peoples who have suffered desaccralizing processes be made visible?	This is a valuable comment, but beyond the scope of the Chapter.
807	Ernesto Alonso Villalvazo Figueroa	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						I find the approach of the chapter very interesting, from the point of view of conservation I think it has a lot of potential to integrate different approaches. Likewise, there have softwares developed that allow different values to be integrated for decision makers which would be relevant to consider (e.g. MARXAN)	Thanks for the suggestion.
815	Mariana Machado García	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						The literature review should include more case-studies, that can help visibilise how methods are used through an in-depth case (including theses).	The review of application follows a systematic review to gain global representation. It has not been possible to cover the scope of the assessment with in-depth case studies.
816	Mariana Machado García	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						Perhaps the review should separate methods by scales (local, national etc) because different methods may be relevant at different scales.	Yes, scale has been considered as well in the analysis.
817	Mariana Machado García	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						Values are sometimes implicit or complex, it is not always something that can be elicited through a simple survey. Anthropologists spend a long time with individuals and communities to understand their values and culture. So it is important the such methods, including multidisciplinary methods, be taken into account.	You are quite right. The SOD presents multiple ways in which values can be elicited. Questionnaires are only one of many tools and approaches that we list. Anthropological methods such as the ones suggested here are discussed in 3.2.1.2 and 3.3.1.3
822	Laura Rojas Gonzalez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						the information presented in the assessment does not represent the whole reality but a subset of it. This has implications, as when things are simplified, some information may be omitted.	This is recognized in section 3.2 (Rationale and Methods used in chapter 3)
823	Laura Rojas Gonzalez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						Review ethnographic methods and use case studies to understand how these methods elicit many of people's feelings.	Ethnographic methods have been included in the analysis, see figure 3.15. We do not use case studies, however, as this would be difficult to justify for just ethnographic methods.
828	Erandi Rivera Lozoya	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						How to go beyond the biases of the reviewed literature? For instance, will you make explicit that your review may be biased because there is much more literature from the North than from the South? What will you do when some methods are not as well documented as others? An effort should be made to balance: diverse methods; qualitative vs quantitative; social and natural sciences; disciplinary vs multi/transdisciplinary approaches.	We have highlighted these aspects where we explain our stratified sample in section 3.2 (Rationale and methods used in chapter 3), in the technical annexes and as best as possible in section 3.4 (Findings).
834	Aline Pingarroni	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						Include in the methods diagram, and in the text, the question of the temporal scale (values change over time).	A new infographic of different assessments indicators have been added in Fig 3.2.
835	Aline Pingarroni	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3						Include in the text, a discussion of the challenge of the loss of information that occurs when diverse values are integrated in a single indicators or when different indicators are homogenised. This is particularly the case with sociocultural values.	Aggregation across value justifications is on of the criteria of the systematic review of valuations (3.2.3). General challenges with aggregation is outlined in section 3.3.1.4

841	Manuel Maass	Mexico	Transdisciplinary Socio-Ecosystem Management, IIES, UNAM	No	Ch. 3					Different values (biophysical, physical, cultural) have different dynamics. We have to adapt how we approach values according to these dynamics. Particularly, the temporal dynamics is important as some values are relatively stable and others change very quickly.	Thank you for your suggestion. We have included temporal scale in the systematic review of valuations.	
842	Manuel Maass	Mexico	Ecosystem Management, IIES, UNAM	No	Ch. 3					How explicitly does the chapter differentiate between scale, level and scope for different types of data?	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.	
848	Alejandro Torres García	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3					Incorporate a review of methods based on the analysis of social networks data (big data) as this provides information on actual behaviour which may be quite different than methods using interviews, to elicit sociocultural values.	The focus of this chapter is on valuation and does pertain also to this type of methods.	
849	Alejandro Torres García	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3					You will need to say very explicitly that in order to address such complex problems, multidisciplinary methods should be used.	We agree and performed changes in accordance to the reviewer suggestion.	
853	Ana María Flores Gutierrez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3					Ch2 and Ch3 need to be better linked. For instance, it is unclear how implicit values described in Ch2 can be evaluated in Ch3.	CH3's scope is explicit valuation (see 3.1 for explanation of the scope). Implicit valuation is picked up in CH4.	
854	Ana María Flores Gutierrez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 3					How will ILK be evaluated? How will you balance the academic literature with grey literature and ILK? How will you report on the biases you find in the literature?	We do not evaluate ILK. We provide an overview and synthesis of IPLC valuation methods and approaches based on multiple sources of evidence. Section 3.2. (Rationale and Methods used in Chapter 3) describes how we gather our evidence and section 3.3 (Valuation of Nature- State of the Art) and 3.4 (Findings) shows how we bring this together to generate key insights. You will note that ILK and IPLC valuation approaches are evidences from grey lit, dialogues and academic lit.	
941	Inge Liekens-VITO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 3	4		80	4	81	I do not think the choice of which methods to apply is subjective, although methods are randomly pict in reality. You can put objective measures like purpose, available data, available resources etc. to decide wich methods to use on the one hand, on the other hand if you want to be inclusive you need to combine different methods.	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
942	Inge Liekens-VITO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 3	8			11	254	state of the art of valuation: it is more a history of Economic valuation of the environment then a history of valuation. I am not an expert but I assume that in parallél with the economic valuation also social valuation methods developed like participative valuation, narratives, ...	Thank you for your feedback. The history of valuation now has multiple "histories" to reflect different disciplinary perspectives on how valuation has evolved.
943	Inge Liekens-VITO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 3	13		320	13	339	An overview of economic, biophysical and social valuation methods has been made in several European Studies such as Openess and Esmeralda (http://www.esmeralda-project.eu/). I would suggest to also look into the deliverables of these projects. e.g. EU FP7 OpenNESS Project Deliverable 4.1., Gómez-Baggethun, E., B. Martín-López, D. Barton, L. Braat, H. Saarikoski, Kelemen, M. García-Llorente, E., J. van den Bergh, P. Arias, P. Berry, L., M. Potschin, H. Keene, R. Dunford, C. Schröter-Schlaack, P. Harrison. EU FP7 OpenNESS Project Deliverable 4.2., Braat, L. C., E. Gómez-Baggethun, B. Martín-López, D. N. Barton, M. García-Llorente, E. Kelemen, H. Saarikoski. Framework for integration of valuation methods to assess ecosystem service policies. European Commission FP7, 2014. State-of-the-art report on integrated valuation of ecosystem services. European Commission FP7, 2014. Report on Social Mapping and Assessment methods Authors: Santos-Martín F. et al. Status: Published Year: 2018	A range of different valuation approaches have been considered and the mentioned studies have been used to develop the list of methods in the review. This is explained in section 3.2 (Rationale and Methodes used in chapter 3) and the results are described in 3.3.3
944	Inge Liekens-VITO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 3	24				579	There is discussion in not use the term 'non-monetary' but use an explicit term for these type of methods e.g. "social methods". The question is then which one.	Thanks for the valuable feedback. We use the term non-economic value indicators and develop cross-disciplinary method families. The revised methodological description 3.2. (Rationale and Methodes used in Chapter 3) and the revised section 3.4 (Findings)explains this.
945	Inge Liekens-VITO	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 3	29		673	38	895	the why/purpose/usefulness/what it exactly measures, answers ...of the selected criteria and indicators must be better framed for policy makers, readers	Thanks for the valuable feedback. The revised section 3.1 (Introduction) aims to makes it more clear what the chapter seek to assess.

1034	Tomas Declercq UNEP	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 3	11		264	<p>You mention commensurability, and directly mention this can be addressed by multi-criteria based valuation methods. The following text on this comes from TEEB on how to address this valid concern: The very idea of valuation exists on the dangerous premise that nature can be reduced to a single (usually monetary) metric, and is thus commensurable. This is akin to equating something like a human rights infraction or loss of life with financial compensation, and fails to take into account that certain values simply cannot be measured, such as intrinsic or existence values of nature (Gatzweiler, 2008, cited in TEEB 2010a, p.162; Sagoff, 2011). This is indeed a serious concern, and any estimate of total economic value runs the risk of leaving out important aspects. It is therefore essential to communicate monetary values with diligence, making clear which dimensions they do and do not cover, and communicating them as a lower boundary, not as 'true value'. TEEB itself goes beyond valuation and attempts to place nature's values in their appropriate context. TEEB acknowledges that economic trade-offs form an important part of policymaking, and that monetary valuation may be helpful in providing economic incentives to sustainably manage ecosystems (Costanza, 2006), or at the very least, trigger the much needed societal debate about the value of nature and its services beyond the conservation of birds and butterflies, considered by many as a luxury of the rich.</p> <p>Source: http://img.teebweb.org/wp-content/uploads/2014/09/TEEB-Challenges-and-Responses.pdf In: Sukhdev, P., Wittmer, H., and Miller, D., 'The Economics of Ecosystems and Biodiversity (TEEB): Challenges and Responses', in D. Helm and C. Hepburn (eds), Nature in the Balance: The Economics of Biodiversity. Oxford: Oxford University Press (2014).</p>	Thank you for your input. The pros and cons of Multi-criteria analysis is now included in section 3.3.1.4		
1035	Tomas Declercq UNEP	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 3	12		295	<p>If you discuss intergenerational equity and irreversible impacts, you may want to include the important ethical debate on discounting choices?</p> <p>TEEB's standpoint on this: The use of positive rates is supported by the view that goods or services delivered later are relatively less valuable when incomes are expected to grow, even though this will typically lead to the long-term degradation of ecosystems and biodiversity; a discount rate of zero translates into a more ethical approach that typically sees our grandchildren valuing nature similarly to our generation, and deserving as much as we do; even the use of negative rates can be applied under the assumption that future generations will be poorer in environmental terms than those living today. Generally speaking, TEEB advocates that a variety of discount rates be considered depending on the time period involved, the degree of uncertainty, ethical responsibilities to the world's poorest as well as future generations, and the scope and nature of the project or policy being evaluated.</p> <p>Source: http://img.teebweb.org/wp-content/uploads/2014/09/TEEB-Challenges-and-Responses.pdf</p>	Thank you for your feedback. Discounting is mentioned in 3.3.1.4, but has not been a focus of the assessment.		
1045	Adelle Blair	Antigua and Barbuda	Government of Antigua and Barbuda - Ministry of Tourism and Investment	Yes	Ch. 3	25		25	626	Literature on VALUES should include perception and culture as both can influence values (Jain, U (2012), Pascual, U. et al (2017)	The focus of this chapter is on valuation. This question may be addressed in Chapter 2 (values).	
1046	Adelle Blair	Antigua and Barbuda	Government of Antigua and Barbuda - Ministry of Tourism and Investment	Yes	Ch. 3	25		628	25	628	Literature on policy and decision-making should include governance. Brunner et al (2005) referred to it as adaptive governance as it integrates science, policy and decision-making. This aspect should be broadened.	Governance is discussed in detail in Chapters 4, 5 and 6.
1047	Adelle Blair	Antigua and Barbuda	Government of Antigua and Barbuda - Ministry of Tourism and Investment	Yes	Ch. 3	28		28	665	665	The inclusion criteria is not clear. What is the methodology for choosing 150 hits? Was the search restricted to the English language? Adams, R. J. et al (2016) and their references note robust methodologies.	The entire detailed procedure with keywords, scoping criteria is now spelled out in the Data Management Reports

1182	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 3	4		4	79	I am not familiar with a use of the term valuation that would normally include all kinds of interventions and actions. Are you suggesting that in Chapters 1 and 2 these are all included in the term 'valuation'? That was not clear to me.	valuation is now defined more sharply		
1183	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 3	5		76	292	5	295	I am not familiar with this controversy or concept. It was explained or referred to very vaguely in previous chapters, I think, but never clarified. It would be helpful to do so here.	This is the topic of section 3.3.4.1
1184	Meredith Root-Bernstein	Chile	Musée de l'Homme, Paris, France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 3			25			616	Figure 3.3. This is a very interesting and valuable mapping in itself. But aren't you creating a big problem for yourself by including things like participant observation and ethnography in your systematic review? Methods and fields such as those can, of course, say something about values, and it's nice that you acknowledge that. But reporting on values is not their primary aim nor do they usually use terminology like "values" and "valuation" except in some specific theoretical work addressing those subjects. How will you deal with this?	This figure has been removed.
1185	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 3				34		816	This is an interesting approach, but isn't it relevant to understand what kind of choice or decision situation the method is, or is intended, to be used for? That is, what kind of valuation output is needed to form a suitable decision-making input?	This comment is pertinent for chapter 4.
1186	Meredith Root-Bernstein	Chile	Musée de l'Homme, Paris, France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 3	37			37		861	I think will be critical for this discussion to clearly distinguish between valuation mechanisms and decision-making mechanisms. There was an example in Chapter 2 where a set of community rituals and interactions in an indigenous group was claimed to be a valuation method. It was not clear to me that value was assessed, measured or assigned during the described activities. Rather, a collective decision was taken on how to act in a particular situation. If valuation refers to all decisions, collective practices, or actions, then it becomes meaningless. It seems to me that valuation procedures may be most relevant to market economies: according to your history of valuation methods, they started in contexts where spending or investment was the issue in question. What does it mean for valuation to exist outside market economies?	Thanks for the valuable feedback. This point is well taken and we hope we have addressed it partially in 3.3.1.5 where we point out to the specific way an IPLC activity or practice might be considered a valuation practice versus another process (such as decision making or valuing itself). We note that, in IPLC contexts, these processes are sometimes done simultaneously and not in the linear way suggested in valuation processes. We have also expanded the Introduction to talk to a much longer history that goes further back than valuation for markets. (3.1.3)
1187	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 3				69		1554	this last section looks like it will be genuinely useful and interesting. Congratulations. I am perplexed however as to what this has to do with the IPBES framework proposed in Chapter 2 (Figures 2.17-2.18-2.19). If we were going to use that framework to assess values, which of these methods follows or supports it?	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
1206	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	General comment (GC)						Chapter 3 is assessing valuation methods and to do so, authors developed a set of excellent questions to guide the chapter. I think that to answer these questions is essential to advance knowledge on what methods better suits in particular social-ecological and political contexts, what methods reveal particular values and NCP that are expressed by certain voices and what methods are best suitable for certain temporal, spatial and governance scales. Nevertheless, I can see some room from improvement in the chapter and its analytical framework, that I will detail in my four major comments below.	Noted, thank you.
1207	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	General comment (GC)						1. it is not clear how the analytical framework used to assess methods link with the questions the chapter aims to answer	Thanks for the valuable feedback. This is now explained in section 3.1 (Introduction) and specifically in Table 3.1 (Approaches used to generate evidence...)

1208	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	General comment (GC)				2. Lack of focus on NCP. I can barely find NCP in the chapter despite methods often value nature's components and NCP. In this sense, I do not only suggest to use the generalizing perspective (as it is briefly included in the chapter), but also I suggest that authors bring the context-specific perspective of NCP to understand how IPLCs value NCP as bundles that follow the logic of their lived experiences (e.g. hunting, fishing, farming, spiritual experiences)	NCPs have now been referred to throughout the chapter.	
1209	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	General comment (GC)				3. Despite the efforts to bring IPLC perspectives and ILK, I think that the current methodological approach to assess valuation methods is not the most appropriate for bringing ILK and IPLCs' perspectives. I am suggesting here few ways to enhance the inclusion of ILK and IPLCs in the chapter. First, I would suggest that authors review the rich ILK dialogues already conducted for the pollination, land degradation, regional and global assessments. At least in the ECA assessment, we found many narratives by which IPLCs expressed the importance of nature and NCP and revealed values. Second, I would suggest that authors bring the context-specific perspective of NCP to understand how IPLCs value NCP as bundles that follow the logic of their lived experiences (e.g. hunting, fishing, farming, spiritual experiences) - This can be done through the ILK dialogues but also through the rich literature on IPLC (e.g. review ethnographical and anthropological studies that do not necessarily used the word 'value' or 'valuation' in their papers. Third, look at less-conventional methods that reveal the values of nature and NCP, such as art-based methods (poetry, tales, songs, paintings, etc.). Finally, by reviewing literature on different indigenous peoples and their connection with nature. E.g. Maori, Inuit, Quechua, Aymara, Kuna-Yala, Mapuche, Emberás, Kwicha, Tsimanes....	Excellent suggestions. We agree and performed changes in accordance to the reviewer suggestions.	
1210	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	General comment (GC)				4. The chapter will benefit from clear definitions of multiple concepts (e.g. elicitation of values, recognizing values, assessing values, valuation cycle, value types, value justifications, value indicators, value frames). Please use as less jargon as possible throughout the chapter.	These definitions have been defined in Chapter 2. The section has been rewritten and the use of the terms in Chapter 3 has improved.	
1211	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	4		66	5	97	Please back up the statements of this section with references.	the SOD is now fully backed up by citations.
1212	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	5		97	5	97	References in table. Add more terms/concepts in the table that are needed to understand this chapter (e.g. elicitation of values, recognizing values, assessing values, valuation cycle, value types, value justifications, value indicators, value frames)	This table has been removed.
1213	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	4		77	4	79	This sentence clarifies what is not considered valuation methods, but I think that it also needs to clarify upfront what is considered valuation methods and give examples for them. I am saying this because later in the chapter, I was wondering why 'knowledge' is considered a method per se. So here it is needed an indication on how different epistemologies understand 'valuation methods'.	valuation is now defined more sharply
1214	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	4		87	4	87	After presenting the results' - reading this first section is not clear what the reader might find as a result. Please bring upfront the type of results this chapter will provide to its readers	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
1215	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	6		145	6	145	'Safe operating space' is a label mainly used for the planetary boundaries. To me framing this question with the 'safe operating space' can be confusing for the readers. I would suggest either to clearly explain this in the text below the question or (better) to avoid this phrasing.	text changed
1216	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	7		169	7	170	Please align figure 3.1. with the concepts presented in the table above (the one with the definitions of key concepts) if possible with the questions of the chapter. As it is now, it is hard to see the connection of this figure with the entry part of the chapter. What do you mean by goals and by principles? What do you mean by valuation cycle? Capacities of who? As it is now, it is difficult to see how the key concepts and conceptual approach align and how these relate with the key questions.	The figure has been removed

1234	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	25		26	650	Will you take advantage of the different languages of authors to conduct a review beyond English. I know that the latin American community is very strong in valuation of ES and NCP, and including more than English would make a great step to go beyond 'conventional' methods.	the state of the art reviews on method family have captured some non-english literature, notably Spanish, but no specific multi-lingual serches were performed. we recognise this is a shortcoming of the chapter.	
1235	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	26		647	26	648	For the sake of transparency, it would have been excellent to see the search strings to evaluate the systematic review process.	Search strings are presented on the Data Management Reports
1236	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	27		661	27	661	Is this figure relevant for assessing valuation methods? If authors believe tha this is essential, then it is important to clarify how did you decide the discipline of the papers? Won't be more accurate the disciplines of the journals (according to WoS or Scopus) where the papers were published?	The key words search is from WoS and not restricted to specific journals. Explanation now in section 3.2.3
1237	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	28		663	29	668	What about OPERAs and OpenNESS?	OpenNESS and operas publications have been included in the literature.
1238	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	31		773	33	789	How do these principles align with the questions? I would expect some connection I can see this information later in the table but an explanation here upfront will help to undersand the purpose of this	Thanks for the valuable feedback. The link between assessment questions and the topics and criteria for the review is explaned in table 3.1 & table 3.3
1239	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	34			35	818	Please explain the logic behind the connections between principles, criterion and questions	The table table that this comment was referring to has now been removed, and text has changed significantly, although we did not include an explicit definition of these terms we believe that the text is now self explanatory.
1240	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	35		819	38	895	First, I would suggest that authors review the rich ILK dialogues already conducted for the pollination, land degradation, regional and global assessments. At least in the ECA assessment, we found many narratives by which IPLCs expressed the importance of nature and NCP and revealed values. Second, I would suggest that authors bring the context-specific perspective of NCP to understand how IPLCs value NCP as bundles that follow the logic of their lived experiences (e.g. hunting, fishing, farming, spiritual experiences) - This can be done through the ILK dialogues but also through the rich literature on IPLC (e.g. review ethnographical and anthropological studies that do not necessarily used the word 'value' or 'valuation' in their papers. Third, look at less-conventional methods that reveal the values of nature and NCP, such as art-based methods (poetry, tales, songs, paintings, etc.). Finally, by reviewing literature on different indigenous peoples and their connection with nature. E.g. Maori, Inuit, Quechua, Aymara, Kuna-Yala, Mapuche, Emberás, Kwicha, Tsimanes....	This was an excellent suggestion. We reviewed all the ILK dialogues that IPBES has ever conducted. We notice that there is a lot of reference made to the importance of nature for IPLC (this is a Ch 2 topic). There was no reference, however, to valuation metodos and approaches: i.e., how to IPLC assess and evaluate and measure the process of valuing or that which is valued? This latter is the scope of Ch 3. We find that there is very little work that has been done to study and understand IPLC valuation methods and approaches
1241	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	38			38	891	Which are ILK Value frames? How will you uncover them?	Thanks for the valuable feedback. Section 3.2 (Rationale and Methods used in Chapter 3) describes the multiple ways that we have evidenced valuation methods including IPLC valuation.
1242	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	44		1001	45	1002	Verifiers of Criterion 1 so far come very much from the western-science approach. I would also encourage authors to actively search for verifiers from ILK perspectives on efficient use of ES, e.g. living in harmony with mother earth.	There is a full set of verifiers co-developed for this and discussed now that address IPLC Principles of reciprocity, respect and others. These were developed with input from the ILK Dialogues 1 and 2 that were conducted as part of the Values Assessment in which 2 to 3 chapter authors participated.
1243	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	44			45	1002	Same comment than above...ILK-perspectives for wellbeing understandings such as living in harmony with mother earth, Sumak Kawsay	IPLC perspectives and ILK were now more thoroughly included in the SOD. Specifically, see Box 3.2 on conceptualizing evidence from an IPLC perspective, see 3.3.1.5 on Valuation practice in IPLC contexts and see section 3.5 where we discuss how the growing field of Indigenous Methodologies can contribute to developing valuation methods that are congruent with IPLC Principles and values.
1244	Berta Martín López	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3	44		1099	45	1099	Which type of knowledges are considered for the coding? Here, knowledge is not considered a method while above in figure 3.3, it was. Please clarify.	There is a full set of verifiers co-developed for this and discussed now

						General comment (GC)				Thank you for the effort in putting together this draft. To be coherent with prior IPBES work and equally innovative, why do you not use the NCP framing (the generalizing perspective and the context-specific perspective) as structure for your chapter? While you were making an effort to include ILK and non-western perspectives, if nevertheless felt very western and conventional by starting with economic valuations, and only vaguely talking about a view (mainly Maori) ILK sources. A stronger emphasis on context-specific perspectives could counter the false dichotomy of generalizing perspectives = western and generalizing perspectives = ILK, as it would offer you also the possibility to include art-based, spiritual, ecotherapy methods which are very common in LC in western countries. A further way to highlight the differences in those two areas (context-specific/generalizing perspective) could be a paragraph or table at the end of each method to highlight limitations, pitfalls and benefits of those methods - e.g. representativity, but also the non-neutral worldviews those methodologies come from such as the discussion of nature capital (see Martinez-Alier's work). Further, while the time frame of valuation is incorporated, a discussion on the legacy effect of land-use/landscape changes is missing, i.e. when values are attributed through reminiscing to a landscape that is no longer there - and hence show up in the valuation as high - but a generation later, the values might adjust to the disturbed landscape and hence be different.	Thanks for the valuable feedback. While we have not used the generalizing perspective and context specific perspective as the foundation for guiding the structure of the chapter, we believe that the comments raised here have been addressed in the SOD. By opening up what we mean by valuation methods and going beyond the standard classifications of methods that there are (economic/non-economic; market-based/non-market based and even sociocultural methods), we believe that we have been able to include more valuation approaches such as those of ecolinguistics, use of art and theater, rituals etc. We have not included ecotherapy as a valuation method - we understand it as a process of valuing, which is not the scope of Ch 3.
1245	Maraja Riechers	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3						
						General comment (GC)				You mention dialogs in which you present your results to indigenous elders. Will this only be indigenous elders or also young indigenous peoples as well as man and woman? I think that such dialogs should involve a diverse set of indigenous peoples from different ages and genders.	The ILK dialogues bring together IPLC leaders and community members selected to represent their communities. They have limited number of people who can participate and a geographical representation to make. They are not able to address all issues of representativeness as you suggest. We agree that they should, but logistically, it has not been possible for them to be.
1246	David Lam	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3						
						General comment (GC)				What does it work and what does not. Narrow definitions. Language problem exclusion	
1247	Loni Hensler	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3						We do not understand what the reviewer means here.
						General comment (GC)					
1248	Steffen Pabst	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3					Many definitions unclear. by starting with economics, the whole chapter will look economically focussed	Thanks for the valuable feedback. Chapter 3 reviews valuation from multiple disciplines. The revised section 3.3 (Valuation of Nature- State of the art) explains this and 3.4 (Findings) also addresses plural aspects of valuation.
						56		56	1247		
1249	Patricia Santillán Carvantes	Germany, Mexico	Group from UNAM in Leuphana University	No	Ch. 3			1246		Hello and congratulations for the effort. In table 3.13 it would be nice to see specific successful examples of the valuation method applied in different contexts and scales.	Thanks for the valuable feedback. Hopefully the revised section 3.1 (Introduction) and 3.4 (Findings) make this clear.
						General				You may be interested in the different valuation methods used linked to the different values of trees and forests, e.g. their landscape aesthetic value or the value of other ecosystem services provided by trees/forests. Some of the most common ones are 'CAVAT', 'Helliwell' and 'i-Tree'. Here is some literature on this which you may find useful: a) Doick et al., 2018. CAVAT (Capital Asset Value for Amenity Trees): valuing amenity trees as public assets. https://www.researchgate.net/publication/324361766_CAVAT_Capital_Asset_Value_for_Amenity_Trees_valuing_amenity_trees_as_public_assets . b) Sarajev, 2008. Street tree valuation systems. Forestry Commission Research Note 008. file:///C:/Users/Acer/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/FCRN008%20(1).pdf .	These papers - if addressing valuation of nature for decision making - have been captured in the corpus
1371	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3						
						General				The following report, especially the list of references, may be useful for this review: O'Brien et al., 2017. Review of methods for integrating cultural ecosystem services, values and benefits in forestry. file:///C:/Users/Acer/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/FR_O'Brien_et_al_Review_of_methods_for_integrating_cultural_ecosystem_services_2017%20(1).pdf	These papers - if addressing valuation of nature for decision making - have been captured in the corpus
1372	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3						

1373	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General				In British forestry, there has been a history of attempting to substantiate that various non-marketed benefits provided by forests/woodland represent an important part of forestry activities to justify public funds for forestry. Building on two forest cost-benefit analyses (HM Treasury, 1972; NAO, 1986), most of the earlier valuation studies focused on the recreational value of woodlands (Scarpa, 2003), the value of forests as a carbon sink (Clinch, 2000; Bateman and Lovett, 2000) and their importance for biodiversity (White and Lovett, 1999). The most comprehensive of these early works, undertaken by Willis et al. (2003), aimed at providing empirical monetary estimates for the values of recreation, landscape amenity, biodiversity, carbon sequestration, pollution absorption, water supply and quality, and archaeological artefacts in forests.	Thank you for your feedback. The topics are included in the new version of the chapter
1374	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General - reference s for above text, in case you want to use these				BATEMAN, I. J. & LOVETT, A. A. 2000. Estimating and valuing the carbon sequestered in softwood and hardwood trees, timber products and forest soils in Wales. Journal of Environmental Management, 60, 301-323.	While we have not cited this reference specifically, we note in the Introduction to the chapter and the Method Family Nature-based valuation that quantifying nature has been a very prominent field in nature valuation.
1375	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General - reference s for above text, in case you want to use these				SCARPA, R. 2003. Social and Environmental Benefits of Forestry. THE RECREATION VALUE OF WOODLANDS. Newcastle: Centre for Research in Environmental Appraisal & Management, University of Newcastle.	Thank you for your feedback. The topic is included in the new version of the chapter. It has not been possible to go into specific case studies in Chapter 3
1376	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General - reference s for above text, in case you want to use these				CLINCH, J. P. 2000. Assessing the social efficiency of temperate-zone commercial forestry programmes: Ireland as a case study. Forest Policy and Economics, 1, 225-241.	Thank you for your feedback. The topic is included in the new version of the chapter. It has not been possible to go into specific case studies in Chapter 3

1377	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General - references for above text, in case you want to use these				BATEMAN, I. J. & LOVETT, A. A. 2000. Estimating and valuing the carbon sequestered in softwood and hardwood trees, timber products and forest soils in Wales. Journal of Environmental Management, 60, 301-323.	While we have not cited this reference specifically, we note in the Introduction to the chapter and the Method Family Nature-based valuation that quantifying nature has been a very prominent field in nature valuation.
1378	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General - references for above text, in case you want to use these				WHITE, P. C. L. & LOVETT, J. C. 1999. Public preferences and willingness-to-pay for nature conservation. Environmental management, 55, 1-13.	Thank you for your feedback. The topic is included in the new version of the chapter. It has not been possible to go into specific case studies in Chapter 3
1379	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General - references for above text, in case you want to use these				WILLIS, K. G., GARROD, G., SCARPA, R., POWE, N., LOVETT, A., BATEMAN, I. J., HANLEY, N. & MACMILLAN, D. C. 2003. The social and environmental benefits of forests in Great Britain. Edinburgh.	While we have not cited this reference specifically, we note in the Introduction to the chapter and the Method Family Nature-based valuation that quantifying nature has been a very prominent field in nature valuation.
1380	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General - references for above text, in case you want to use these				NAO 1986. Review of Forestry Commission Objectives and Achievements London: Her Majesty's Stationery Office.	These papers - if addressing valuation of nature for decision making - have been captured in the corpus

1381	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General - references for above text, in case you want to use these				HM TREASURY 1972. Forestry in Great Britain: an Interdepartmental Cost/Benefit Study London: Her Majesty's Stationery Office.	Thank you for your feedback. The topic is included in the new version of the chapter. It has not been possible to go into specific case studies in Chapter 3	
1382	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General				There has been a lot of work on integrating different values and different valuation methods recently. You may want to add a subsection on this.	Thanks for the valuable feedback. Section 3.3.1.4 is about integrative methods	
1384	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 3	General (either ch. 3 or chp 4)				I would have also liked to see something related to how best to conduct a valuation project to make it successful and to have an impact. There is relatively little literature on this, but you may want to look at: a) Raum et al., 2019. Achieving impact from ecosystem assessment and valuation of urban greenspace: The case of i-Tree Eco in Great Britain. Apologies for suggesting my/our own work, but I thought it might be of use. Also, b) Edwards, D. M., & Meagher, L. R. (2019). A framework for evaluating forestry research: understanding and demonstrating impact to inform future action. Forest Policy and Economics In press.	These papers - if addressing valuation of nature for decision making - have been captured in the corpus	
1419	Teina Mackenzie	Cook Islands	Te Ipukarea Society (TIS) Cook Islands Environmental NGO	No	Ch. 3	10		292	10	292	Insert "marine and" between "or" and "land" There is only reference to terrestrial (land)	Noted, the text has been reviewed.
1436	Neville H McClenaghan	Ireland	Galway-Mayo Institute of Technology (GMIT)	No	Ch. 3	11		255	11	255	"brief description of the current understanding of valuation" - this is important.	No further action required.
1518	Finnish National IPBES panel (Finland)	Finland	Finnish national IPBES panel (Luontopaneeli)	No	Ch. 3						Overall: Markets for goods and services based on nature (natural resources, tourism etc.) should be included as a valuation. They provide a direct indication of the instrumental values.	Thanks for the valuable feedback. Using markets for valuation is included in the list of valuation methodologies - see section 3.3.1.3 Method family 3: behaviour-based valuation
1519	Finnish National IPBES panel (Finland)	Finland	Finnish national IPBES panel (Luontopaneeli)	No	Ch. 3						Overall: the concepts should be better in line with Ch. 1 and Ch. 2, e.g. concerning the classification of values.	we have mainly closely followed IPBES classifications and have also alligned with some of the new concepts presented in CH2
1520	Finnish National IPBES panel (Finland)	Finland	Finnish national IPBES panel (Luontopaneeli)	No	Ch. 3	1		7	1	7	A good one, different methods and methodologies serve different purposes (and have different costs).	Thanks, no further action required.
1521	Finnish National IPBES panel (Finland)	Finland	Finnish national IPBES panel (Luontopaneeli)	No	Ch. 3	11		250	11	254	Also e.g. spatial relation to values (see Ch. 2): Horne, P., Boxall, P., Adamowicz, W.L. (2007).	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
1522	Finnish National IPBES panel (Finland)	Finland	Finnish national IPBES panel (Luontopaneeli)	No	Ch. 3	24		616	24	616	The figure is somewhat confusing - revealed preference is in social preference, but travel cost method (which is revealed preference method) is in quantitative?	This figure has been removed.
1523	Finnish National IPBES panel (Finland)	Finland	Finnish national IPBES panel (Luontopaneeli)	No	Ch. 3	60		1316	60	1316	The assessment of literature introduced in previous pages sounds very good!	Thanks!
1556	Kavita Sardana	India	TERI SAS	No	Ch. 3	66		1472	66	1474	An important component of ILK inclusion is to focus on already existing conservation that is taking place on the grounds of local and indigenous knowledge. The values are already getting generated without mainstreaming these resources into policy making. One such example is the sacred groves, that are small and fragmented landscapes that are conserved on religious grounds and are capable of sustaining more diverse species than protected forests. It is important to bring them under valuation exercise, and therefore into national accounting through green accounting.	Thanks for the valuable feedback. Some of what is suggested here is within the scope of Ch 3 and we have attended to it. In Section 3.3.1.5 we note that IPLC conduct valuation for their own decision making that is not necessarily related to policy making or decision-making beyond their territories. We note this as a unique characteristic of IPLC valuation methods that calls us to refrain from suggesting that all valuation processes have a decision-making purpose motivating them.
1557	Kavita Sardana	India	TERI SAS	No	Ch. 3	18			18	442	Valuation exercises are incomplete, without linking the willingness to pay (measures) to some existing policies that compensate the local stewards for their conservation efforts. One such policy that can link these welfare measures to compensation mechanisms is payment for ecosystem services. Once, value has been attributed to an ecosystem in terms of economic surplus generated, a payment of ecosystem service model can be used for compensation (Sardana, Kavita. "Tourists' Willingness to Pay for Restoration of Traditional Agro-forest Ecosystems Providing Biodiversity: Evidence from India." Ecological economics 159 (2019): 362-372.)	Thanks for the valuable feedback. Willingness to accept / willingness to pay studies have are included in the review. See guidance document for review Topic 6

1601	John Gossage	United Kingdom	Cyfoeth Naturiol Cymru/Natural Resources Wales	No	Ch. 3					Time constraints dictate that I can give only a general comment to chapter 3 which I have read once, augmented by reading the key messages of the next three chapters, but no more than that.	No further action required.
1602	John Gossage	United Kingdom	Cyfoeth Naturiol Cymru/Natural Resources Wales	No	Ch. 3					Whilst I have not read in detail the IPBES conception of the policy cycle, the diagramme in a subsequent chapter seems broadly consistent with the use of the ROAMEF cycle by public services in Britain. Within this valuation has a role in both options appraisal (A) and evaluation (E), and both are encouraged to use mixed methods that would include both quantitative and qualitative analysis, for example mixing economic appraisal with multi-criteria analysis.	Thanks for the valuable feedback. We agree with the observation
1603	John Gossage	United Kingdom	Cyfoeth Naturiol Cymru/Natural Resources Wales	No	Ch. 3					Within appraisal the objective is to identify the intersection of two sets, one of feasible and the other of desirable outcomes. This set is then divided into a choice and a non-choice set, with the opportunity cost of the choice set defined in terms of the benefits and intrinsic values foregone by the rejecting the non-choice set. Cost-benefit analysis is often applied to indicate the opportunity cost, the higher the benefit-cost ratio the lower the opportunity cost. However it is not the only technique, and strictly speaking it can only really be applied if the counter-factual used in subsequent evaluation is not itself significantly changed by the policy, programme or project. In these circumstances scenario's may need to be developed to investigate likely states of the world with and without the intervention.	We are not sure which aspect of the chapter this comment relates to but the new section 3.5.3 seems to be relevant to the point made
1604	John Gossage	United Kingdom	Cyfoeth Naturiol Cymru/Natural Resources Wales	No	Ch. 3					Section 3.2.1 is useful. My one quibble would be the dating of TEV to the 1980's when the concepts of use and non-use value go back to classical economics and before. Adam Smith noted the high exchange value and low use value of diamonds and contrasted this with the low exchange value but high use value of water (Wealth of Nations, chap. IV, para. 13). Of course the concepts were revived in the 1980's.	Excellent point. Section 3.1.2 (history of valuation) now also covers some earlier trends, while the focus has remained on the recent history.
1605	John Gossage	United Kingdom	Cyfoeth Naturiol Cymru/Natural Resources Wales	No	Ch. 3					Lines 229 to 231 are contestable. This is an interpretation of the meaning of "total" that is being projected from the framing IPBES wishes to adopt, it is perhaps more apt to interpret it in contradistinction to "marginal." Marginal analysis is very often the best option. For example in industrial regulation there is often a requirement for "Best Available Technology" designed to keep firms at or very close to the efficient production boundary coupled with a requirement to avoid disproportionate cost. So as well as being required to be on the efficient frontier the firm is required to equate marginal damage costs with marginal abatement costs. However in situations where major structure change is required the inter-temporal dynamics may require that policy gives clear signals that there should be no further investment in a whole class of technologies, since such investment is likely to become stranded. Such dramatic structural change is justified by the prospect of irreversible adverse bio-physical transitions, such as those that might be triggered by biodiversity loss (the sixth mass extinction) as well as by anthropogenic climate change.	Thank you for your feedback. We have made the point clearer, that the TEV framework has been used to highlight that different types of values are important to people.
1606	John Gossage	United Kingdom	Cyfoeth Naturiol Cymru/Natural Resources Wales	No	Ch. 3					"In other words markets fail: they generate prices that do not give accurate signals about where to devote resources for their most productive use, and prices do not reflect the true cost to society of our economic activities." Why are we waiting: the logic, urgency and promise of tackling Climate Change? Nicholas Stern, the MIT press 2015.	Yes agreed. This is an important rationale for valuation and included in the assessment through the criteria "purpose of valuation" section 3.2.3.2. Review topic 2: Purpose of the valuation
1607	John Gossage	United Kingdom	Cyfoeth Naturiol Cymru/Natural Resources Wales	No	Ch. 3					Section 3.2.2 sets out three key debates. It would perhaps be relevant to mention that the use of money by mainstream economics rests upon its usefulness as a numeraire because of its three functions; as a means of exchange, a store of value and a unit of account. Accounting, whilst not strictly speaking part of economics, is nevertheless valued by economists because it provides a structured narrative that is effective in disambiguating data. Energy, the ability to do work, might provide an alternative numeraire. The connection between the advent of widespread exploitation of fossil fuels and total factor productivity is being investigated by economic historians such as EA Wrigley (Energy and the English Industrial Revolution and The path to sustained growth -both on my bookshelves but sadly not yet read).	Thank you for the suggestion. We distinguish between monetary and non-monetary value indicators.

1608	John Gossage	United Kingdom	Cyfoeth Naturiol Cymru/Natural Resources Wales	No	Ch. 3					I have nothing of value to add to section 3.3 save to note that as well as being biased against IPLC (acknowledged in the text) the approach does not engage with the many applications of the ecosystems approach that are being conducted outside academia.	We recognise that the FOD was missing a lot of ILK content and IPLC valuation. We feel that we have addressed the "bias against IPLC" concern in the SOD in three main ways. 1. we have included the in history of valuation a whole section on valuation in IPLC territories (conducted by outsiders) 2. We have included a text box on how - to understand valuation methods and approaches in IPLC contexts - one must understand how 'evidence' is understood by IPLC. 3 26 ILK experts and knowledge holders have contributed to the chapter as contributing authors.		
1621	Luis Pacheco Cobos	Mexico	Facultad de Biología Xalapa, Universidad Veracruzana	No	Ch. 3	22		22	555	include GPS-tracking among the methods that could serve as tool for further describing or supporting value systems. Such empirical records, can show human-resource relationships or management in space and time. GPS-tracking could serve as an instrumental or relational valuation tool, as it can systematically register human behavior, and its implicit landscape use and knowledge. When locally handled such data can be used, once the proper ethical arrangements are made, to put pressure on decision-making actors at governmental spheres (local pressure on regional or global scales). Sections that I found suitable for doing this are "3.2.2 Unresolved concerns and ongoing debates"; "3.2.2 Searching and selecting evidence on valuation" [by the way, here replace "3.2.2" with "3.3.2", check numbering for the rest of the sections in the table of contents]; "3.5.2 AQ2 WHICH VALUATION METHODS?" I share references dealing with and discussing the potential use of GPS technologies for psychological research or monitoring biodiversity. The latter could help to build a strong body of evidence (data) that would allow to take informed decisions when trying to make a sustainable use of biological resources --- Pacheco-Cobos, L., Rosetti, M. F., Montoya Esquivel, A., & Hudson, R. (2015). Towards a traditional ecological knowledge-based monitoring scheme: A proposal for the case of edible mushrooms. Biodiversity and Conservation, 24(5), 1253–1269. https://doi.org/10.1007/s10531-014-0856-6 --- Shekhar, S., Feiner, S., & Aref, W. G. (2015). From GPS and virtual globes to spatial computing—2020. Geoinformatica, 19(4), 799–832. https://doi.org/10.1007/s10707-015-0235-9 --- Wolf, P. S. A., & Jacobs, W. J. (2010). GPS Technology and Human Psychological Research: A Methodological Proposal. Journal of Methods and Measurement in the Social Sciences, 1(1).	These papers - if addressing valuation of nature for decision making - have been captured in the corpus		
1622	Luis Pacheco Cobos	Mexico	Facultad de Biología Xalapa, Universidad Veracruzana	No	Ch. 3	64			1427	65	1457	among the methods that could serve as tool for further describing or supporting value systems. Such empirical records, can show human-resource relationships or management in space and time. GPS-tracking could serve as an instrumental or relational valuation tool, as it can systematically register human behavior, and its implicit landscape use and knowledge. When locally handled such data can be used, once the proper ethical arrangements are made, to put pressure on decision-making actors at governmental spheres (local pressure on regional or global scales). Sections that I found suitable for doing this are "3.2.2 Unresolved concerns and ongoing debates"; "3.2.2 Searching and selecting evidence on valuation" [by the way, here replace "3.2.2" with "3.3.2", check numbering for the rest of the sections in the table of contents]; "3.5.2 AQ2 WHICH VALUATION METHODS?" I share references dealing with and discussing the potential use of GPS technologies for psychological research or monitoring biodiversity. The latter could help to build a strong body of evidence (data) that would allow to take informed decisions when trying to make a sustainable use of biological resources --- Pacheco-Cobos, L., Rosetti, M. F., Montoya Esquivel, A., & Hudson, R. (2015). Towards a traditional ecological knowledge-based monitoring scheme: A proposal for the case of edible mushrooms. Biodiversity and Conservation, 24(5), 1253–1269. https://doi.org/10.1007/s10531-014-0856-6 --- Shekhar, S., Feiner, S., & Aref, W. G. (2015). From GPS and virtual globes to spatial computing—2020. Geoinformatica, 19(4), 799–832. https://doi.org/10.1007/s10707-015-0235-9 --- Wolf, P. S. A., & Jacobs, W. J. (2010). GPS Technology and Human Psychological Research: A Methodological Proposal. Journal of Methods and	These papers - if addressing valuation of nature for decision making - have been captured in the corpus
1669	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 3							Chapter 3 - It would be interesting to highlight the following idea: when valuation comes from indigenous cosmology, that is more vital, integral and deep.	We believe that the SOD now addresses this suggestion. Specifically, Section 3.3.1.5 assesses 26 contributions from ILK experts on valuation methods conducted by IPLC for IPLC purposes.

1670	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 3					Methods typology (Figure 3.3.) displays the complexity of valuation methods. Despite the fact that traditional knowledge of biodiversity is recognised, we identify more valuation approaches from the viewpoint of Indigenous peoples.	This figure has been removed.
1685	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 3					Chapter 3 - Guiding questions. We would like to suggest including a question such as the following: What type of values tend to be visible and invisible in accord with used methods?	We've addressed which indicators and values become visible through different valuation methods through our review.
1686	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 3					Chapter 3 - Analytical framework. We would like to emphasise that Indigenous view is based on cosmology (e.g., integrity; all things are connected; all things give life; all things are living). That integrity could be also reflected on the figure as a principle.	The analytic framework figure has been revised substantially. Nonetheless, we can not say with certainty that it fulfills the "integrity" criterion suggested here. See Fig. 3.1
1687	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 3					Chapter 3 - Valuation methods can be seen as knowledge forms. From 106 valuation methods identified so far, it would be interesting to know how many are ethno-cultural methods (Figure 3.3) i.e. What is the relevance of those methods on the Assessment?	This figure has been removed.
1697	Marta Díaz	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 3					Chapter 3 - Valuation methods. How many methods of integrating valuation results are available? It would be suggested to evaluate their level of incidence.	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
1698	Marta Díaz	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 3					Chapter 3 - Valuation Methods. It would be informative to include the spatial scale at which a method has been applied. That could have an impact on the use of results.	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
1717	Felipe Guerra	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 3					Chapter 3 - Valuation methods. It would be helpful to analyse methods that integrate multiple values, different knowledge fields, qualitative and quantitative information, etc.	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
1729	Felipe Guerra	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 3					Literature review. It would be interesting analysing the way international conventions and free trade agreements define values of nature.	Thank you for you suggestion. This topic is not within the scope of Chapter 3 and our focus on explicit valuation methods
1733	Viviana Moreno	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 3					Chapter 3 - Valuation methods. It would be helpful to specify what type of social groups could conduct valuations e.g., universities, institutions, ethnic groups, primary/secondary education, etc.	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
1734	Viviana Moreno	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 3					Chapter 3 - Analysis and synthesis of evidence. It would be advisable to take into account different sources of information e.g., NGOs, public and private institutions whose unpublished reports could provide relevant information of valuation studies.	Noted, but it has not been possible to systematically assess unpublished documents.
1742	Miguel Bedoya	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 3					Chapter 3 - Methods typology. It would be important to analyse what type of aspect (e.g., type of language, actors, scales, elicitation of types of values, institutions, participation, etc.) is explored in accord with a particular valuation method.	Thanks for the valuable feedback. Hopefully the revised section 3.2 (Rationale and Methods used in Chapter 3) makes this clear.
1744	Dora Estrada	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 3					Chapter 3 - Figure 3.3. The visual impact of the image could improve if other colours are used as well as showing the weight of evidence (economic methods) by using other style.	This figure has been removed.

1745	Dora Estrada	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 3					Chapter 3 - Literature review. It would be suggested to arrange a type of public call for locating key documents on institutions.	Thanks for this valuable comment. Unfortunately at this late stage and given the available expertise we cannot delve very deeply into this idea.
1798	Tomas Declercq	Belgium	UNEP, but comments in personal capacity	No	Ch. 3	11		256		The title 'unresolved concerns' may be formulated more positively? In the text you do refer to some ways to address the valuation concerns. Also, at times unclear whether the valuation is about economic valuation methods, or valuation methods in the broad sense.	Noted. This heading has been replaced
1799	Tomas Declercq	Belgium	UNEP, but comments in personal capacity	No	Ch. 3	11		264		addressed by multi-criteria based valuation methods. The following text on this comes from TEEB on how to address this valid concern: The very idea of valuation exists on the dangerous premise that nature can be reduced to a single (usually monetary) metric, and is thus commensurable. This is akin to equating something like a human rights infraction or loss of life with financial compensation, and fails to take into account that certain values simply cannot be measured, such as intrinsic or existence values of nature (Gatzweiler, 2008, cited in TEEB 2010a, p.162; Sagoff, 2011). This is indeed a serious concern, and any estimate of total economic value runs the risk of leaving out important aspects. It is therefore essential to communicate monetary values with diligence, making clear which dimensions they do and do not cover, and communicating them as a slower boundary, not as 'true value'. TEEB itself goes beyond valuation and attempts to place nature's values in their appropriate context. TEEB acknowledges that economic trade-offs form an important part of policymaking, and that monetary valuation may be helpful in providing economic incentives to sustainably manage ecosystems (Costanza, 2006), or at the very least, trigger the much needed societal debate about the value of nature and its services beyond the conservation of birds and butterflies, considered by many as a luxury of the rich. Source: http://img.teebweb.org/wp-content/uploads/2014/09/TEEB-Challenges-and-Responses.pdf In: Sukhdev, P., Wittmer, H., and Miller, D., 'The Economics of Ecosystems and Biodiversity (TEEB): Challenges and Responses', in D. Helm and C. Hepburn (eds), Nature in the Balance: The Economics of Biodiversity. Oxford: Oxford University Press (2014).	Thank you for your input. The pros and cons of Multi-criteria analysis is now included in section 3.3.1.4
1800	Tomas Declercq	Belgium	UNEP, but comments in personal capacity	No	Ch. 3	12		295		If you discuss intergenerational equity and irreversible impacts, you may want to include the important ethical debate on discounting choices? TEEB's standpoint on this: The use of positive rates is supported by the view that goods or services delivered later are relatively less valuable when incomes are expected to grow, even though this will typically lead to the long-term degradation of ecosystems and biodiversity; a discount rate of zero translates into a more ethical approach that typically sees our grandchildren valuing nature similarly to our generation, and deserving as much as we do; even the use of negative rates can be applied under the assumption that future generations will be poorer in environmental terms than those living today. Generally speaking, TEEB advocates that a variety of discount rates be considered depending on the time period involved, the degree of uncertainty, ethical responsibilities to the world's poorest as well as future generations, and the scope and nature of the project or policy being evaluated. Source: http://img.teebweb.org/wp-content/uploads/2014/09/TEEB-Challenges-and-Responses.pdf	Thank you for your feedback. Discounting is mentioned in 3.3.1.4, but has not been a focus of the assessment.

1844	Adam P. Novick <anovick@uoregon.edu>	Unites States	University of Oregon	No	Ch. 3	12	292	12	294	<p>Like treatments by many others, here, discussion of the debate about substitutability between man-made and natural capital" (e.g., species-based land-use restrictions vs. species-base liability for mitigation) overlooks that the survival of some species depends on active management by humans (such as to simulate historic burning by pre-industrial cultures or to control invasive exotic vegetation), and correspondingly overlooks potential opportunities to improve the survival of such species through policy efficiencies. Specifically, I find that implicitly or explicitly, both sides of the debate tend to assume existing conditions will persist in the absence of disturbance by humans. Examples include "baseline" assessments in exception programs under the US Endangered Species Act (Novick 2013, ch. III).</p> <p>For ways the Assessment address might address this issue at least more generally, cf. my "General Comment" in this form.</p> <p>Work cited:</p> <p>Novick, Adam P. 2013. "Risk to maintenance-dependent species from orthodoxy in species-based land-use regulation." Master's thesis. University of Oregon. http://hdl.handle.net/1794/13343 [Appreciating the Assessment and all who are contributing to it, I nevertheless respectfully find it overlooks a fundamental issue, with potentially important policy implications. Specifically, throughout (but perhaps most relevant to chapters 1, 2, and 5), it apparently overlooks that the survival of species can depend on continuing active management by humans (such as to simulate historic burning by pre-industrial cultures or to control invasive exotic vegetation) (cf. review by Novick 2013, pp. 2-3). <i>By over-stressing, I find the Assessment overlooks both (1) threats to such</i></p>	Beyond the scope of the assessment
1884	Kowarsch, Martin	Germany	Mercator Research Institute on Global Commons and Climate Change (MCC), Berlin	No	Ch. 3					<p>I would also have expected a review of what we actually know (at global scale) about people's actual values (empirically) with regards to nature / environment.</p>	Thanks for the valuable feedback. The Assessment is a methodological assessment. Actual value estimates are outside the scope of the assessment.
2046	CONANP	Mexico	CONANP, Mexico	Yes	Ch. 3	4	75	4	77	<p>The message marked in yellow stated that the valuation is specific to recognize values which contradicts the information given in chapter 2 in which also are consider values that are not measured in the present, is important to have a clear and common messages for the type of analysis that is going to be constructed trough the six chapters</p>	Implicit values have not been considered as it is beyond the scope of this chapter. Chapter 2 pictures the broad context, and also chapter 4 picks up on part of this.
2047	CONANP	Mexico	CONANP, Mexico	Yes	Ch. 3	4	77	4	79	<p>Policy instruments are important to decision making and are currently the main obstacle in measurement of achievements of the different agendas and conventions in the world, this type of information is very important and if is not going to be consider in this chapter is necessary to included in another or at leas state as a conclusion that in the future there is a need to include it</p>	This is mentioned in Chapter 4 and 6.
2048	CONANP	Mexico	CONANP, Mexico	Yes	Ch. 3	5	97	5	97	<p>The table introduced at the beginning of this chapter is helpful and having one at the beginning of each chapter could solve many doubts about the several definitions and concepts given along</p>	Thanks for the suggestion.
2049	CONANP	Mexico	CONANP, Mexico	Yes	Ch. 3	10	236	10	236	<p>The table in this section could be enriched with data examples that allow the interpretation of the valuation used for each one</p>	This table has now been removed.
2050	CONANP	Mexico	CONANP, Mexico	Yes	Ch. 3	16	390	2	555	<p>Through this entire section the analysis has been done explaining the process that is going to be integrated and not the results itself, is information that could and should be included only on the introduction and on a briefer summary.</p>	Thanks for the valuable feedback. Hopefully the revised section 3.3 (Valuation of Nature- State of the art) and 3.4 (Findings) make the results of the assessment clear.
2051	CONANP	Mexico	CONANP, Mexico	Yes	Ch. 3	23	563	23	563	<p>The methods evaluated in this chapter are compile in an appendix but not described at least at minimum in the entire chapter, is recommended to do both in order to give as much information as possible</p>	Thanks for this valuable comment. Unfortunately at this late stage and given the available expertise we cannot delve very deeply into description of each method.
2052	CONANP	Mexico	CONANP, Mexico	Yes	Ch. 3	28	663	28	663	<p>An explanation of what is "grey literature" should be given, also a description about the content of each site could be helpful</p>	Grey literature is now better organised and sampling was structured in thematic reviews and review of previous assessments, we hope this makes things/expectationas and scope more clear
2053	CONANP	Mexico	CONANP, Mexico	Yes	Ch. 3	General				<p>General comment: The chapter does not deep into the definition of existing valuation and is more about the construction of the search done</p>	Definition has been added "We define valuation as the application of methods and approaches to recognize values of nature and/or human-nature relationships, with the aim to make them explicit and enable their inclusion in decision-making."
2087	System of Environmental-Economic Accounting (SEEA)	N/A	System of Environmental-Economic Accounting (SEEA)	N/A	Ch. 3						Sorry it is not clear what is meant here, and there is no reference or explanation provided.

2089	System of Environmental-Economic Accounting (SEEA)	N/A	System of Environmental-Economic Accounting (SEEA)	N/A	Ch. 3					At least with regard to the economic perspective, the predominant application of environmental economics seems to ignore the importance in the literature of wealth accounting and related material. The perspective that environmental valuation commenced with Hotelling in 1947 (Chapter 3) ignores the literature starting from Fisher (1906) who incorporated many of the themes present in the general ecosystem services/NCP type thinking. The present versions of this literature embodied in wealth accounting by the World Bank and others which has a strong connection to the economic values being discussed in the chapters seem to be ignored.	Thank you for your feedback. Wealth accounting is not a focus of the chapter. We have included SEEA initiative in section 3.3.4.2
2115	Susan Goff	Australia	Government	Yes	Ch. 3	23	575	23	575	May be worth considering two aspects that may be important: one is procedural justice and its inalienable relationship to both epistemological and ontological justice. The former is mentioned on p30 line 707 with the report claiming that it is beyond the scope, however it was discussed at some length in chapter 2, so it is unclear why it is disappearing here. This has systemic implications for the results as is evident in table 3.10 - low results for LVF (Living as nature) and dominance of monetary and quantitative approaches. See Cassell and Johnson, 2006: Action research: explaining the diversity. Human Relations. 59 (6): 783-814 for discussion about how AR includes interrogation of, transparency about philosophical assumptions enabling knowledge architecture coherence and ontological plurality. The second matter that this line and approach risks, is that the privileging of empirical, targeted decision focussed methods excludes "living systems" methodologies. See Simms (2003) Living systems science methodology for managing complexity and change. Systems Research and Behavioural Science. 20: 401-408. Without either methodologies that can make philosophy explicit and accountable, or living systems methodologies the data generated by the framework risks biasing decisions towards materialist and consumerist interests - risking ecosystem viability.	Thank you for your feedback. The section has been rewritten and we have improved the consistency of the terminology used.
2116	Susan Goff	Australia	Government	Yes	Ch. 3	27	659	27	659	Absence of sociocultural is noted.	We are no longer using the classification of methods that considers sociocultural methods as a group of methods. Methods under this group are now split across the four methods families (Section 3.3.3).
2117	Susan Goff	Australia	Government	Yes	Ch. 3	29	668	29	668	Recommend adding to the table 3.4 - NAILSMA https://www.nailsma.org.au/	This table has been removed.
2118	Susan Goff	Australia	Government	Yes	Ch. 3	32	764	32	764	This para highlights the lack of attention to procedural justice as previously discussed.	Thanks for the valuable feedback. Hopefully the revised section 3.2 (Rationale and Methods used in chapter 3) makes it clear that procedural justice is considered.
2165	Rovshan Abbasov	NA	MEP/Bureau	No	Ch. 3	11		11		In the table An overview of conventional valuation methods is given. In this table not all the valuation methods are given. For example, Market price method. I suggest you review all the methods and show in a separate column how these methods can be applied. For example, hedonic pricing method is applied to value impact of environmental amenities on housing prices.	This table has been updated substantially and split into Method Families. A full list of methods is also available in the Appendix and includes several market-price methods.
2166	Rovshan Abbasov	NA	MEP/Bureau	No	Ch. 3					I think you should talk about the Payment for Ecosystem Services as well. Do you think it is valuation method? I think yes, because we value nature and value how much we should pay for that.	Thank you for your suggestion but the comment we better addressed in Chapter 4. Payment for Ecosystem Services is a main topic in Chapter 4. Policy instruments are not assessed in Chapter 3
2208	Mersudin Avdibegović	NA	MEP/Bureau	No	Ch. 3	8	170	8	175	It is clear that the conceptual elements in the Figure 3.1 (and also in the Figure 3.2) are essential to the Chapter 3 analysis. Besides, these Figures explain the logical connection among Chapters (Chapter 3 is between Chapter 2 - dealing with values and Chapter 4 - dealing with decision making) and contribute to telling a storyline. However, the approach to develop Chapters' conceptual frameworks (it is also the case with the conceptual scheme/diagram in Chapter 4) may confuse readers, particularly decision makers. For the promotion of IPBES activities and outcomes, the term "conceptual framework" could be somehow "reserved" for the IPBES conceptual framework exclusively. In the context of this, I suggest to consider renaming of the sub-chapter 3.1.3 (line 158) and set it as "Chapter 3 rationale".	This figure has now been replaced with a figure titled "Rationale for Chapter 3 assessment questions".

										As concerns grouping the methods into categories, based on whether they assess qualitative and quantitative data, the mixed methods (combining qualitative and quantitative approaches) should be also considered for such a typology. Eventually, the authors recognized this themselves (identification of hybrid studies in lines 996-997 and in further text).	Thank you for your feedback. Please see table 3.3. (Correspondence of review topics and their criteria to the six Chapter 3 Assessment Questions)
2209	Mersudin Avdibegović	NA	MEP/Bureau	No	Ch. 3	41	991	41	992		
2287	MEP & Bureau	NA	MEP/Bureau	No	Ch. 3	General				Methods in the chapter should use some kind of typology: eg. Qualitative, quantitative, mixed or hybrid.	Thank you for your feedback. Please see table 3.3. (Correspondence of review topics and their criteria to the six Chapter 3 Assessment Questions)
2448	Eric Fokam	NA	MEP/Bureau	No	Ch. 3	5	104	5	106	There should be a first question: "Is Valuation necessary?"	This assumption is made explicit in 3.5 (Future outlook for valuation)- showing the (explicit) valuation is in some cases not necessary
2449	Eric Fokam	NA	MEP/Bureau	No	Ch. 3	8	171	8	175	Title should be very clear that this is the chapter's conceptual framework, not to be mistaken with IPBES conceptual framework	This figure has now been replaced with a figure titled "Rationale for CH3 assessment questions".
2450	Eric Fokam	NA	MEP/Bureau	No	Ch. 3	20	489	21	517	The authors should use the past tense to describe their methodology as this would be reviewed in the context of work already done, even at this early stage. Use of future maintains the the impression of a scoping documents!	This has been addressed in the SOD with the exception of a few places where we have not undertaken something and refer to the future. We do not want to give the reader the impression that certain work has been undertaken when it has not yet been done.
2451	Eric Fokam	NA	MEP/Bureau	No	Ch. 3	33	800	33	800	Authors must provide more robust justification for combining "equity and recognition"	This has been rephrased to justice and recognition throughout the document.
2452	Eric Fokam	NA	MEP/Bureau	No	Ch. 3	35	855	36	856	Some acronyms should be explained as a footnote under "table 3.5"	This has been removed from SOD.
2453	Eric Fokam	NA	MEP/Bureau	No	Ch. 3	35	855	36	856	Under "Equity-fairness/Distributional/... the two indicators are the same ("intergenerational equity") and should be revisited	This section has been thoroughly rewritten.
2519	Gorucu Ozden	NA	MEP/Bureau	No	Ch. 3	65	1414	69	1560	From point of methodologies and data collection and also measuring of the values, there are somewhat bottlenecks to value of the nature, so these present constraints would be better to be mentioned.	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.
2718	Claire Ntshane	South Africa	Department of Environment, Forestry & Fisheries	Yes	Ch. 3	12	277	12	277	Remove "in" after "particular"	The text in the SOD has shifted and changed substantially. This should no longer be a concern.
2725	Claire Ntshane	South Africa	Department of Environment, Forestry & Fisheries	Yes	Ch. 3	27		27		Figure 3.5 is not clear, details on the caption could also be improved	Thanks for the valuable feedback. Hopefully the revised section 3.4 (Findings) makes this clear.