

Comment form for 1st Review Phase of the Deliverable 2b) Regional and subregional assessments of biodiversity and ecosystem services for Africa, Chapter 5 ‘Integrated and cross-scale analysis of interactions of the natural world and human society’

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Reviewers:

Abdelfattah Badr (AB)
Diane Douglas (DD)
German IPBES Coordination office and national scientists (IPBES)

Josiane Seghieri (JS)
Rainer M Krug (RMK)
Susan Ringrose (SR)

Comment #	Reviewer Name	From Page (start)	From Line (start)	To Page (end)	To Line (end)	Comment	How Addressed?
1	German IPBES Coordination office and national scientists (IPBES)	0	General			A half-to-one-page abstract/executive summary related to the background, methodology and key findings would be helpful, particularly for new readers. An abstract is already included in Chapter 6.	Key messages done
2	German IPBES Coordination office and national scientists (IPBES)	0	General			Presently, a "Synthesis summary and key messages" is given under 5.8. However, a half-page summary at the beginning of the chapter referring to the status, methodology and major findings seems be more helpful particularly for new readers.	Key messages done
3	Abdelfattah Badr (AB)	2	64			Chapter 5 may be replaced by this chapter	Addressed
4	Abdelfattah Badr (AB)	3	76			The figure 5.1, the IPBES conceptual framework adopted from Diaze 2015 was presented as Figure 1.1 in chapter 1. You may refer to that figure since the two chapters are printed in one book	Addressed (subsequently replaced with citation to Chapter 1 and Figure 5.1 deleted)
5	German IPBES Coordination office and national scientists (IPBES)	3	84			Figure 5.1. The role of case studies, best practices and evidence or sensitivity studies related to modelling outputs is unclear; "data and knowledge" seems week.	This is well noted however, reviewers seem to be referring to a different figure, need to clarify this further
6	Josiane Seghieri	4	91	4	91	TEEB (Economics of Ecosystems and Biodiversity) should be explicated for its first citation in the chapter	Addressed

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7	German IPBES Coordination office and national scientists (IPBES)	5	156			Not clear where the Costanza citation ends. Please check spelling of "Costanza" throughout.	Ending to reference done and "Costanza" spelling addressed
8	German IPBES Coordination office and national scientists (IPBES)	7	213	ff		Charts need improvement since hardly readable.	This will be addressed in collaboration with the Africa TSU
9	German IPBES Coordination office and national scientists (IPBES)	7	215			The resolution of Figure 5.3 is too low.	This will be addressed in collaboration with the Africa TSU
10	Abdelfattah Badr (AB)	7	215			The quality of Figure 5-3 requires improvement	This will be addressed in collaboration with the Africa TSU
11	Abdelfattah Badr (AB)	8	228			The meaning of the highlighted sentence, "Regions also important and national scale, is not clear".	A comment has been added to address this
12	Rainer M Krug (RMK)	8	250	8	254	I don't understand why this is an example and what the graph actually tells me. I am completely lost here. I can see the different scales as axis, but where can I see gaps? A point or a line would be an example for me?	A comment has been added to address this
13	Abdelfattah Badr (AB)	8	254			Figure 5.4 requires quality improvement	This will be addressed in collaboration with the Africa TSU
14	Rainer M Krug (RMK)	9	273	9	277	I assume that these examples will each get at least a paragraph to	Agreed, a comment has been added to address this.

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						explain why these are examples of the problems caused by scale issues.	
15	Abdelfattah Badr (AB)	12	263			Table 5.1 requires quality improvement	This will be addressed in collaboration with the Africa TSU
16	German IPBES Coordination office and national scientists (IPBES)	12	365			Chapter 5.3.4.1 is complicated. The content of Table 5.1 is not easy to understand.	We shall probably omit this
17	Abdelfattah Badr (AB)	13	381			Write "Chapters 5 and 6" instead of "Chapters 6 and 5".	Addressed
18	German IPBES Coordination office and national scientists (IPBES)	13	406			The separation in several sections (5.4.1 to 5) referring to the case study may be deleted to avoid fragmentation.	This is well noted and will be adhered to
19	German IPBES Coordination office and national scientists (IPBES)	13	408			Was the model also used to simulate and test the historical development?	No this wasn't done, probably the historical development was beyond the scope of the study
20	Rainer M Krug (RMK)	13	413	13	413	Shouldn't this be 4.4.1.1 and so on until the case study is finished?	This is well noted and will be adhered to
21	Abdelfattah Badr (AB)	13	378-390			The figure to the left of the page has no legend; it is repeated on page 17 and on page 21	This is a narrative figure that shows the reader where in the whole chapter we are focusing on. This approach obtained a favorable review as being quite helpful in understanding the context and was proposed to be adopted by other

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							chapters. A decision to delete or keep the approach will be discussed with Chapter LAs.
22	Abdelfattah Badr (AB)	14	423			Why write all names of authors (Fisher, Swetnam, Burgess, McKenzie & Willcock, 2012) just write senior author et al	Addressed
23	Abdelfattah Badr (AB)	14	447			Figure 5 has two sources in Swetnam et al., 2011 and Fisher et al., 2012. Which source is correct? The figure quality requires improvement	Addressed
24	Abdelfattah Badr (AB)	15	467-473			The small box to the right may be deleted or numbered and extended by more useful information	Will be considered accordingly
25	Abdelfattah Badr (AB)	17	531			Revise title to be: "Scenarios for the food-energy-water nexus in Sub-Saharan Africa"	Addressed
26	Rainer M Krug (RMK)	17	539	18	545	Figure 5.10 in itself does not support the statement concerning hunger and human wellbeing. I would suggest to add the population development forecasts to the graph as these are essential to understand the real impact.	Will be considered accordingly
27	Abdelfattah Badr (AB)	17	511-523			The figure to the right has no legend; it is repeated on page 13 and on page 21	This is a narrative figure that shows the reader where in the whole chapter we are focusing on. This approach obtained a favourable review as being quite helpful in understanding the context and was

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							proposed to be adopted by other chapters. A decision to delete or keep the approach will be discussed with Chapter LAs.
28	Abdelfattah Badr (AB)	18	554			The information given in Figure 5.11 has two sources, who is the true source?	Editorial
29	Abdelfattah Badr (AB)	19	577			The information given in Figure 5.12 has two sources, who is the true source?.In addition the quality of the figure is too poor. Moreover, the current condition on the figure is considered 1961 to 1990; we are now in 2016	Addressed
30	Rainer M Krug (RMK)	20	623	20	623	Not only structured, but also reproducible and easier to communicate as well as more "objective" in the sense that each aspect leading to the result of the prediction (model) can be discussed and evaluated.	
31	German IPBES Coordination office and national scientists (IPBES)	20	632	ff		Are these memory points for scenario development really necessary in this detail for this chapter?	
32	Abdelfattah Badr (AB)	20	646			What do you mean and how would you do the direct linkage of results from Chapter 2, chapter 3 and Chapter 5; this is chapter 5).	

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33	Abdelfattah Badr (AB)	20	654			What do you mean and how would you do the direct linkage of governance issues from Chapter 6 and results from Chapter 5; this is chapter 5).	
34	Abdelfattah Badr (AB)	20	665			Delete Chapter 5 and replace "two of" by "two for" (highlighted)	Editorial
35	Abdelfattah Badr (AB)	20	655-662			These eight line need revision and completion	Editorial
36	Abdelfattah Badr (AB)	21	669-677			The figure to the right has no legend; it is repeated on page 13 and on page 17	This is a narrative figure that shows the reader where in the whole chapter we are focusing on. This approach obtained a favourable review as being quite helpful in understanding the context and was proposed to be adopted by other chapters. A decision to delete or keep the approach will be discussed with Chapter LAs.
37	Abdelfattah Badr (AB)	22	704			There is no 2b in Chapter 5; all subtitles start with 5.	Editorial
38	German IPBES Coordination office and national scientists (IPBES)	22	710			This chapter needs rephrasing.	Editorial
39	Abdelfattah Badr (AB)	22	726			Replace "Also see Table 5.3" with "Table 5.3 in brackets"	Editorial
40	German IPBES Coordination	22	728			Table 5.3 is unclear.	Editorial

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	office and national scientists (IPBES)						
41	German IPBES Coordination office and national scientists (IPBES)	22	729	33	1121	What is the better term "scenarios" or "projections"?	Editorial
42	Abdelfattah Badr (AB)	23	736			Remember to add the [Comment: The GEO5 touches on these and can be included- waiting for GEO6 to be released]	Editorial
43	Abdelfattah Badr (AB)	24	793			The link to Chapter 6 must be explained and reference should be made to Table 5.4 not to Figure 5.13	Editorial
44	Abdelfattah Badr (AB)	24	762-765			The text starting with the critical factors etc and the information given in the table are regarded as Fig.5.13 which is not true. The text should not be presented as a photo or a figure	Editorial
45	Abdelfattah Badr (AB)	25	817			Write the following reference Hamann, Biggs & Reyers, 2015) as Hamann et al. 2015	Editorial
46	Abdelfattah Badr (AB)	25	827			Make sure that the intended comment is properly made	Editorial
47	Abdelfattah Badr (AB)	26	861			Write the reference as(Bren et al. 2016).	
48	German IPBES Coordination	26	862			Once again. It seems too simplistic to attribute the key role to foreign	therefore we need accurate statistics on actual data

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	office and national scientists (IPBES)					enterprises since more than 50% of investment is made by domestic actors.	
49	German IPBES Coordination office and national scientists (IPBES)	26	867			The introduction of GMO is not necessarily bound to foreign investment. E.g. GMO cotton in Westafrica, where cultivation follows long-established, even colonial lines and patterns.	Noted
50	Abdelfattah Badr (AB)	27	879			The quality of Figure 5.14 needs improvement, and its source should be identified	Removed
51	German IPBES Coordination office and national scientists (IPBES)	27	879			The source of the land grabbing map Figure 5.14 needs to be added.	Removed
52	German IPBES Coordination office and national scientists (IPBES)	27	879			If you want to get an idea of land investment in Africa, why not refer to the land matrix, it gives most recent structures and allows for visualization.	http://www.landmatrix.org/en/
53	Josiane Seghieri	27	881	27	889	Some positive aspects may also be considered here. Indeed, some papers mentioned that woody cover has increased on average in the Sahel, and this contributes significantly to the observed greening (Kaptué et al. 2015 ; Brandt et al. 2015 & 2016). Hundreds of thousands of periodic but	

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						unpredictable rain fed small holder African farmers in tropical Africa leading them to have adopted evergreen agriculture farming systems that provide friendly exploitation of soils while are adapted to mitigate climate variability/change effects, increase food crop yields, household food security and incomes (Garrity et al. 2010 ; Lahmar et al. 2012).	
54	Rainer M Krug (RMK)	27	887	27	888	Cultivation includes also forestry plantations, which can have a considerable impact by e.g. changing fire regimes, invasion of plantation species into natural areas (e.g. pines).	
55	German IPBES Coordination office and national scientists (IPBES)	28	906			Chapter 5.8 "Synthesis summary and key messages" should clearly refer to the previous given knowledge including scenarios and case studies.	
56	Rainer M Krug (RMK)	28	932	28	933	I am not happy about the "that motivate their use" part. A model is "designed" to address a certain question and that defines the framework (scales and type of question) in which the model can "only" be used. Taking the model "outside" this framework (e.g. using a global model to predict local changes) will make its predictions and results	

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						unusable. So it should rather read "that motivate their design and development".	
57	Abdelfattah Badr (AB)	28	941			The references, annexes should be carefully revised and edited	Editorial
58	Susan Ringrose (SR)		91			Explain the TEEB initiative before using initials only	Addressed (similar to Row 5 above)
59	Susan Ringrose (SR)		107			Please note that you are writing this for policy makers from 54 different countries most of whom have their own perspective on ecosystems and biodiversity issues - so rather than over-generalising perhaps best to subdivide the continent into sub-regions - E,W,S,E and Central and be prepared to consider/develop scenarios for each	This is well noted and a narrative on how this should be applicable to specific regions has been added. However, reservations exist on managing our expectations regarding what scenarios we can do for what regions rather than promise that these will be conducted for all regions, discussions will further centre around what is feasible given capacity constraints the Chapter is facing.
60	Susan Ringrose (SR)		123		132	Decision-policy makers need hard facts wrt to ES and biodiversity and the human inter-relationships - so my guess is that more generalised pseudo-facts will carry the issues no further.	There is no explicit mention on how the reviewer prefers to improve or address the chapter. We regard this as a general comment. The chapter explicitly delves into the details on how the inter-relationships will be addressed (See lines 123 to 134 of Original file).
61	Susan Ringrose (SR)		148		174	These are repeats from previous chapters	Will liaise with CLAs for Chapters 1, 2 and 3 to omit any repetition and avoid redundancy

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62	Susan Ringrose (SR)		179			A quick internet check just produced about 18000 references to work undertaken on African mangroves including their vulnerability - suggest you use some of these sources	Further reference material will be used in relation to African Mangroves and their vulnerability
63	Susan Ringrose (SR)		190		204	Clarify whether you are referring to Africa or the world here. Why not use the MA 2005 report to cite specific examples?	A note has been added to consider this comment
64	Susan Ringrose (SR)		212			Optimised' is misplaced here - 'exploited' is more accurate	Addressed
65	Susan Ringrose (SR)		258		261	Substantiated models used in the African context would be very useful here	Agreed, a comment has been added to address this
66	Susan Ringrose (SR)		282		288	More repeated text on global issues - maybe this section should be in Ch 1.	Agreed, a comment has been added to address this
67	Susan Ringrose (SR)		293			Expanding on and explaining Fig 5.5 would be very useful	Agreed, a comment has been added to address this
68	Susan Ringrose (SR)		348		364	Would recommend 5 different key scenarios be adopted - for N,S,W,E and central Africa at the very least. Over-generalisation will impress no-one - especially not policy-decision makers.	Comment added to address this remark
69	Susan Ringrose (SR)		413			Explain pros and cons of GIS modelling and degrees of accuracy	Will be considered accordingly
70	Susan Ringrose (SR)		493			The inclusion of community members in planning scenarios is not new and	is well noted

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						does not guarantee policy maker buy-in (though it might help)	
71	Susan Ringrose (SR)		543			The lack of cereal growth may be positive for Ecosystem Services and Biodiversity?	possibly and this has been added to the narrative
72	Susan Ringrose (SR)		551			What conclusion are you drawing on agricultural expansion and its impact on ES and B??	
73	Susan Ringrose (SR)		576			What conclusion are you drawing on energy issues and its impact on ES and B?	Noted
74	Susan Ringrose (SR)		602			What conclusion are you drawing on water stress and its impact on ES and B??	Noted
75	Susan Ringrose (SR)		836			Note that there are a lot of transboundary projects still going on in southern Africa - e.g.KAZA project, OKACOM and Peace Parks all with websites so the issues/countries covered and results so far can be documented.	done scenarios on water usage, more competing uses, FEW nexus
76	Susan Ringrose (SR)		889			There has been a lot of range degradation work undertaken throughout Africa - use internet to find/read references for use as examples here	Noted
77	Diane Douglas (DD)					Good treatment of issues. No recommendations for revision.	Thanks for the comment

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78	Rainer M Krug (RMK)					Just a comment: I like the idea of adding a graph to the beginning of a chapter - it masks understanding the context of the chapter much easier. Maybe this could be done for other chapters as well?	Thanks for the comment, possibility to discuss with other CLAs as to whether they would consider this approach