

| Reviewer Name   | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|---|---------------|-------------------|-------------------|---------------|---------------|---|--|
| Binaya Raj Shivakoti  | General       | 0                 | 0                 | 0             | 0             | APR includes a lot of general statements, definitions, and references with global scope (not necessarily APR focused). Some of the statements are duplication from already existing UN publication and are not direct fit to IPBES scope  | Thank you. We have hopefully improved this in the last iteration where we have focused on including subregional synthesis.                       |
| Government of Japan   | General       | 0                 | 0                 | 0             | 0             | Data gaps exist throughout the draft assessment report. For improvement of the current and future reports, data gaps, especially those on contents that have very limited scientific reports (e.g. EcoDRR, incentives and mainstreaming but not limited to these), should clearly state the existence of the data gaps in the report and possibly on the SPM as well.   | Thank you. We have aimed to make this more explicit in the last iteration.   |
| IPBES Knowledge and Data Task Force (KD TF)/ Task Group on Indicators (TGI) | General       | 0                 | 0                 | 0             | 0             | This review provides feedback from the IPBES Knowledge and Data Task Force (KD TF) / Task Group on Indicators (TGI) on the use of IPBES core indicators in your assessment. We see potential for inclusion of additional core indicators and for the more consistent use of the standardized visuals provided. For information on core indicators potentially relevant to a given chapter, please see <a href="http://www.ipbes.net/indicators">http://www.ipbes.net/indicators</a> (or see the tab named, "core indicators" in this spreadsheet) and check the indicator trend graphs shared by your TSU. For the trends of IPBES core indicator, standardized visualizations should be used as much as possible to ensure the consistency between and within the assessments. The KD TF/TGI aim to follow up with specific recommendations in the near future. In the meantime, do not hesitate to reach out to them through your TSU or the KD TF TSU ( <a href="mailto:ipbes.kdtsu@gmail.com">ipbes.kdtsu@gmail.com</a> ).  | Thank you. We have incorporated the useful materials provided by the task force and task group on indicators across various chapters.            |
| IPBES NFP - Australia   | General       | 0                 | 0                 | 0             | 0             | <p>In addition to our specific comments on the SPM and individual chapters, we also have some more general feedback below. We hope this feedback will be considered in the final drafting process to produce a comprehensive final paper, thus ensuring relevance and usefulness for a range of decision makers. Australia appreciates this is a second order draft and notes along with major final editing to ensure consistency of acronyms and references for example.</p> <p>1. There is a lack of clear guidelines and recommendations for policymakers, particularly in the Summary for Policy Makers which is where we would expect to see them. What is really needed is a quick and easy guide to help a range of decision makers develop and implement policies which reflect the latest scientific data which this report should include.</p> <ul style="list-style-type: none"> <li>o The SPM is a summary of the Executive Summaries of each chapter. Rather than a summary of key findings the SPM needs to cover in brief what is the state of the environment in the APR, what could it look like in the future and what are the actions that could be taken for the region. Presenting the information in its current format is not helpful to those who cannot read the document in full due to insufficient technical expertise or time constraints.</li> </ul> | Thank you for this important feedback. We have considerably revised the SPM based on the inputs received and the guidance of the MEP and Bureau. |
| IPBES NFP - Australia   | General       | 0                 | 0                 | 0             | 0             | <p>2. The case studies in the report are not detailed enough in their current state to be broadly applicable, with little information on their outcomes, methods, and successes.</p> <ul style="list-style-type: none"> <li>o Case studies are frequently repeated across the chapters. More examples including possible applications in different landscapes/areas/political environments would be useful as well as the case studies effectiveness, implementation and any lessons learned.</li> </ul>  | We have aimed to improve on the case studies in the last iteration.  |

| Reviewer Name                                 | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|---|---------------|-------------------|-------------------|---------------|---------------|--|--|
| IPBES NFP - Australia                         | General       | 0                 | 0                 | 0             | 0             | <p>3. Lack of consistency throughout the report's chapters, including definitions used for essential concepts.</p> <ul style="list-style-type: none"> <li>o For example, terminology with 'bio' in front should be referenced accordingly. Definitions exist for these terms and concepts in other international documents such as biocultural (CBD) and biosphere (UNESCO) where these definitions exist they should be referenced as such and if they are new concepts they must be referenced.</li> </ul>   | Thank you, they have been referenced and included in the glossary.   |
| IPBES NFP - Australia                         | General       | 0                 | 0                 | 0             | 0             | <p>4. The use throughout the report of references which are significantly dated or not consistent throughout the chapters. This makes the assessment appear to have a lack of a clear methodologies which seek to establish the quality and clarity of the evidence base used to make claims throughout the report.</p> <ul style="list-style-type: none"> <li>o Cross referencing across chapters needs to be fully considered. The statistics or information is conveyed differently across the chapters despite it discussing the same topic or issue. For example, the references to MEAs should be as per their official name and referenced consistently throughout. References to other things such as the Aichi Biodiversity Targets and the Fifth Global Biodiversity Outlook are referenced inconsistently.</li> </ul> | Thank you, we have cross-checked to the extent possible.   |
| Pham Ngoc Bao                                 | General       | 0                 | 0                 | 0             | 0             | -Many repetitions and inconsistencies (words) are found in the report. Significant re-structuring (within and across the chapters) and editing are necessary.  | Thank you, this has been addressed in the last iteration.  |
| Ramsar Convention Secretariat                 | General       | 0                 | 0                 | 0             | 0             | We recommend that as in the regional assessments for Africa and the Americas, the area of Ramsar Sites, wetlands protected under the Ramsar Convention as internationally important by sub-region, be included in this assessment as an indicator. See: <a href="https://rsis.ramsar.org/">https://rsis.ramsar.org/</a>  | Thank you, this has been included in chapter 3 and 4.  |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Core Indicator 'Protected area coverage of Key Biodiversity Areas' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Ed Lewis (email: <a href="mailto:Edward.lewis@unep-wcmc.org">Edward.lewis@unep-wcmc.org</a> )  | This has been added in chapter 3.  |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Core Indicator 'Percentage of Undernourished People' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Carlo Cafiero (email: <a href="mailto:Carlo.Cafiero@fao.org">Carlo.Cafiero@fao.org</a> )   | We could not find an appropriate place to incorporate this but have mentioned chronically hungry population. |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'The Wildlife Picture Index (disaggregated by protected area)' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Jorge Ahumada (email: <a href="mailto:jahumada@conservation.org">jahumada@conservation.org</a> ).  | This index works only in some parts of the region  |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Wetland Extent Trend Index' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Sarah Darrah (email: <a href="mailto:Sarah.Darrah@unep-wcmc.org">Sarah.Darrah@unep-wcmc.org</a> )  | This was addressed in chapter 3.   |

| Reviewer Name                                 | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|---|---------------|-------------------|-------------------|---------------|---------------|---|---|
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Trends in invasive alien species vertebrate eradications' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Shyama Pagad (email: <a href="mailto:s.pagad@auckland.ac.nz">s.pagad@auckland.ac.nz</a> )   | We could not find an appropriate place to incorporate this.                 |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator RAMSAR areas is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Maria Rivera (email: <a href="mailto:RIVERA@ramsar.org">RIVERA@ramsar.org</a> )   | This was addressed in chapter 3.  |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Number of countries with national instruments on biodiversity relevant tradable permit schemes' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . These indicators are country-specific, so they can be disaggregated by countries in your region. However, given the incomplete country coverage, any regional aggregates cannot be taken to represent the entire region. Currently we have data on about 58 countries. [Just to note, we also have information on countries with biodiversity-relevant taxes in place]. More information on this is available from the Indicator Focal point Katia Karousakis (email: <a href="mailto:Katia.KAROUSAKIS@oecd.org">Katia.KAROUSAKIS@oecd.org</a> ) | The data was not available in a form that could be used for the assessment. |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Trends in potentially harmful elements of government support to agriculture (produced support estimates)' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator is available for the OECD as a whole and has not been disaggregated as such. The original data on (total) government support to agriculture is available on the OECD website by country. More information on this is available from the Indicator Focal point Katia Karousakis (email: <a href="mailto:Katia.KAROUSAKIS@oecd.org">Katia.KAROUSAKIS@oecd.org</a> )   | The data was not available in a form that could be used for the assessment. |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Better Life Index' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . The data is available for only 38 countries and therefore it would be difficult to be used regionally the way IPBES has classified these. More information on this is available from the Indicator Focal point Katia Karousakis (email: <a href="mailto:Katia.KAROUSAKIS@oecd.org">Katia.KAROUSAKIS@oecd.org</a> )  | The data was not available in a form that could be used for the assessment. |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Protected area coverage of terrestrial, marine and freshwater ecoregions' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Ed Lewis (email: <a href="mailto:Edward.Lewis@unep-wcmc.org">Edward.Lewis@unep-wcmc.org</a> )   | This was addressed in chapter 3.  |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Growth in species occurrence records accessible through GBIF' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Tim Hirsch (email: <a href="mailto:thirsch@gbif.org">thirsch@gbif.org</a> )   | We could not find an appropriate place to incorporate this.                 |

| Reviewer Name                                 | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|---|---------------|-------------------|-------------------|---------------|---------------|--|--|
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Trends in the numbers of invasive alien species introduction events' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Shyama Pagad (email: <a href="mailto:s.pagad@auckland.ac.nz">s.pagad@auckland.ac.nz</a> )   | This was addressed in chapter 4.   |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Robert Hoft (email: <a href="mailto:robert.hoft@cbd.int">robert.hoft@cbd.int</a> ) | We could not obtain the data in a form that was usable for the assessment. |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Information provided through the financial reporting framework, adopted by decision XII/3' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Robert Hoft (email: <a href="mailto:robert.hoft@cbd.int">robert.hoft@cbd.int</a> )  | We could not obtain the data in a form that was usable for the assessment. |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the IPBES Highlighted Indicator 'Number of world natural heritage sites per country per year' is used in this assessment. Indicator information is available from the IPBES Indicator portal and the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Douglas Nakashima (email: <a href="mailto:D.Nakashima@unesco.org">D.Nakashima@unesco.org</a> )  | We could not find an appropriate place to incorporate this.                |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the Indicator 'Trends in Loss of Reactive Nitrogen to the Environment' is used in this assessment. Indicator information is available from the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Albert Bleeker (email: <a href="mailto:Albert.Bleeker@pbl.nl">Albert.Bleeker@pbl.nl</a> ).  | We could not find an appropriate place to incorporate this.                |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the Indicator 'Ocean Health Index' is used in this assessment. Indicator information is available from the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Benjamin Halpern (email: <a href="mailto:halpern@nceas.ucsb.edu">halpern@nceas.ucsb.edu</a> )   | We could not find an appropriate place to incorporate this.                |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the Indicator 'Cumulative Human Impacts on Marine Ecosystems' is used in this assessment. Indicator information is available from the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Benjamin Halpern (email: <a href="mailto:halpern@nceas.ucsb.edu">halpern@nceas.ucsb.edu</a> )  | We could not find an appropriate place to incorporate this.                |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the Indicator 'Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species' is used in this assessment. Indicator information is available from the BIP website <a href="http://www.bipindicators.net">www.bipindicators.net</a> . This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Shyama Pagad (email: <a href="mailto:s.pagad@auckland.ac.nz">s.pagad@auckland.ac.nz</a> )                                       | This has been addressed in chapter 4.                                      |

| Reviewer Name                                 | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|---|---------------|-------------------|-------------------|---------------|---------------|--|--|
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the Indicator 'Biodiversity Barometer' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Rik Kutsch Lojenga (email: rik@ethicalbiotrader.org)  | We could not find an appropriate place to incorporate this.  |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the Indicator 'Red List Index (impacts of utilisation)' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Tom De-Meulenaer (email: Tom.DE-MEULENAER@cites.org)   | This has been added in chapter 3.  |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the Indicator 'Water Quality Index for Biodiversity' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Hartwig Kremer (email: hartwig.kremer@unep.org)   | This has been addressed in chapter 4.  |
| The Biodiversity Indicators Partnership (BIP) | General       | 0                 | 0                 | 0             | 0             | We would recommend that the Indicator 'Number of Parties to the CBD that have deposited the instrument of ratification, acceptance, approval or accession of the Nagoya Protocol' is used in this assessment. Indicator information is available from the BIP website www.bipindicators.net. This indicator can be disaggregated/made available for this region, more information on this is available from the Indicator Focal point Beatriz Gomez (email: 'beatriz.gomez@cbd.int')   | This has been added in chapter 6.  |
| David González                                | Ch.2          | 0                 | 0                 | 0             | 0             | All throughout the text it is important to recognize when value systems are being discussed and when we are only discussing values. They are not the same and should not be confused. This is well done in para. 348- 364. This is important because the mandate of the chapter is to assess the values and not so much the value systems of nature and it's contributions to people. Thus, you need to go down to the level of assessing such values.   | Thank you, this has been considered in the last iteration of the chapter   |
| David González                                | Ch.2          | 0                 | 0                 | 0             | 0             | There is a need to contextualize from the beginning the approach to multiple conceptualizations of values in all assessments according to the proposal in the guide on values. This is well done in section 2.2 however it should match the IPBES approach to values as stated in IPBES/4/INF/13   | Thank you, this has been considered in the last iteration of the chapter   |
| David González                                | Ch.2          | 0                 | 0                 | 0             | 0             | While economic values are not to be prioritized viz-a-viz other types of values (social, health, etc.) it is clear that this is one value dimension that will be sought by many governments. As part of a pluralistic value framing, it is important to not disregard economic values. Economic values would need to be contextualized under the multiple conceptualizations of values approach. This should ideally be done in Chapter 2 of the Regional assessments. In this assessment is present in section 2.3.3 however it is not strong enough and it does not translate in relevant messages for the SPM. This is something that should be done. | Revisions have been made to the chapter by assessing the ES in terms of economic values. See subsection 2.3.1 and 2.3.3 in particular. |
| David González                                | Ch.2          | 0                 | 0                 | 0             | 0             | There is a need to synthesise assessed economic values of NCP within the broader multiple types (instrumental, relational) and dimensionality of values (social, health, etc.). This could be shown by means of a table which provides key information about the values assessed, including those pertaining to economic values. It is important to make explicit what values are being assessed and identify gaps (e.g., lack of information on some types of values). This should ideally be done in Chapter 2 of the assessment.  | Revisions have been made to the chapter by assessing the ES in terms of economic values. See subsection 2.3.1 and 2.3.3 in particular. |

| Reviewer Name               | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|-----------------------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| David González              | Ch.2          | 0                 | 0                 | 0             | 0             | The MEP will submit further guidance to support the integration of multiple values in all assessments. We advise you to take this guidance into consideration.  | Revisions have been made to the chapter by assessing the ES in terms of economic values. See subsection 2.3.1 and 2.3.3 in particular. |
| IPBES Secretariat/TSU       | Ch.2          | 0                 | 0                 | 0             | 0             | The guidance from the IPBES MEP and Bureau on the Summary for Policy Makers (SPM) has pointed out that the key findings should highlight subregional similarities/differences wherever possible, as all four regions are quite heterogeneous ecologically, socially and politically. Since any statement in the SPM must be backed by evidence contained in specific sections of the main chapter text, this means that each chapter needs to have covered all of the subregions (to the extent possible) in order to respond to the above guidance. Please therefore check whether it would be possible to improve the balance of the coverage of subregions in your chapter, in particular for the sections of the text that are biased towards only some parts of the Asia-Pacific.  | Thank you, this has been considered in the last iteration of the chapter   |
| Joanne Perry NZ Focal point | Ch.2          | 0                 | 0                 | 0             | 0             | general comment - some parts of this chapter are very good, while other sections could do with a serious edit to streamline the discussion. There needs to be some clear linkages back to the intent of the chapter, and while the summary is good, the text in general does not lead you seamlessly to the conclusions made. A lot of material could be stripped out, in particular descriptions of institutions etc and put into a glossary and this space utilised for relevant regional case studies and a more fullsome assessment of what is working, what isn't in the AP region.  | Thank you, the whole chapter has been edited.  |
| Kwan-Sung Song (NFP Korea)  | Ch.2          | 0                 | 0                 | 0             | 0             | It is necessary to present values of ecosystem services in the entire biomes within the region and provide major influencing factors through analyzing trends of changes in biodiversity and ecosystem services for the environmental policy.   | Revisions have been made to the chapter by assessing the ES in terms of economic values. See subsection 2.3.1 and 2.3.3 in particular. |
| Rahul Goswami               | Ch.2          | 0                 | 0                 | 0             | 0             | My congratulations to the chapter authors for having reached this stage of an assessment that is truly Herculean. That it is a work in progress and should remain so is no diminishment of the authors' effort and of the quality of evidence and insights provided. Very well done.  | Thank you.   |
| Richard Corlett             | Ch.2          | 0                 | 0                 | 0             | 0             | I think the structure and basic contents are fine but there are several major problems and a lot of minor ones. The three major ones are: 1. neglect of the >90% of the people of the APR who are NOT indigenous people. I work on and with indigenous people myself, but I do not believe that this report should be only about them, as a lot of this chapter is. The nearly 50% who live in urban areas are people too and also depend on ES and deserve a good quality of life. 2. Much of what is written about climate change here is not supported by the IPCC AR5 report (I was a Lead Author for the WG2 'Asia' chapter' which is cited) or any other recent literature. In particular, the frequent references to 'increasing climatic variability' need to be detailed - what is varying more and where? - and backed up by recent science citations. Moreover, it is essential that the Paris Agreement and the region's National Determined Contributions are mentioned. All but, I think, Nepal have submitted one. 3. A number of sections have entirely old (>10 years) citations, suggesting to me that they have been written directly from old studies without updating. In some places 20-30 year old figures are cited as 'recent'! There is new literature and data for all this, so there is no reasonable excuse. | Thank you, addition of content on urbanisation has been considered in the last iteration of the chapter                                |
| Tatsuya Horikiri            | Ch.2          | 0                 | 0                 | 0             | 0             | Consistency throughout the assessment is needed in how to mention Aichi (Biodiversity) Targets.   | Thank you, this has been considered in the last iteration of the chapter   |

| Reviewer Name | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|---------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| Thomas Brooks | Ch.2          | 0                 | 0                 | 0             | 0             | The IPBES definition of "biodiversity" includes "ecosystems" (see e.g. <a href="http://www.ipbes.net/sites/default/files/downloads/IPBES_2_INF_2_Add.1.pdf">http://www.ipbes.net/sites/default/files/downloads/IPBES_2_INF_2_Add.1.pdf</a> ; also Pollination assessment p481, and Africa assessment SOD Chapter 1, Page 5, Lines 142-145). So, avoid use of phrases like "biodiversity and ecosystems", which is a tautology and unnecessary repetition. Instead, either a) if the intent is to refer to "ecosystems" a specific level of ecological organisation, then delete "biodiversity", b) if the intent is to refer to "biodiversity" generally, delete "ecosystems", or c) replace "biodiversity" with something like "genetic diversity, species, and ecosystems". Examples that need correcting include Page 3 (Lines 71-72), Page 4 (Line 130), Page 7 (Line 277), Page 21 (Line 948), Page 30 (Line 1136), Page 44 (Line 1657), Page 61 (Lines 2358-2360)   | Thank you, this has been considered in the last iteration of the chapter                                 |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Comments specific to particular lines follow further below, but the initial following comments I think are relevant to both chapters 2 and 3. The scoping for chapter 2 indicates that it will assess NCPs including the status/trends of the NCPs. The scoping for chapter 3 indicates that it will build on the chapter 2 assessment of NCPs and look at the status/trends of biodiversity and ecosystems with an eye to how that influences NCPs. These tasks normally are a close fit, but are in fact overlapping in the case of NCP18. NCP18 is mostly about the contribution of biodiversity itself in providing "maintenance of options" or "option value". For example, NCP18 refers to "Benefits (including those of future generations) associated with the continued existence of a wide variety..." Living variety is of course another way of saying "biodiversity". This NCP18 benefits statement echoes the oldest discussions of the value of biodiversity itself as a benefit (following e.g. Haskins 1974; reviewed in Faith 2017*). *Faith 2017 summarised: "this link between biodiversity and human well-being actually traces back to the "pre-history" of "biodiversity" (roughly, the history of the term before it was invented). Haskins (1974: 646) summarised an important discussion meeting where participants called for "an Ethic of Biotic Diversity in which such diversity is viewed as a value in itself and is tied in with the survival and fitness of the human race". Haskins (1974: 646) warned, "Plants and animals that may now be regarded as dispensable may one day emerge as valuable resources" and that extinction "threatens to narrow down future choices for mankind". Roush (1977: 9) similarly argued that "diversity increases the possibility of future benefits" (for review, see Farnham 1997). IUCN's (1980: section 3) arguments for the conservation of diversity (referring to "the range of genetic material found in the world's organisms") echoed Haskins: "we may learn that many species that seem dispensable are capable of providing important products, such as pharmaceuticals, or are vital parts of life-support systems on which we depend." Later philosophical discussions supported these perspectives. Norton (1986) argued that diversity itself has utilitarian value. Randall (1986: 103) similarly considered unit species and proposed that all species not already distinguished in having recognised human-use values "would be treated as having a positive but unknown expected value." These ideas flowed on to discussions around the new term "biodiversity". McNeely (1988) and Reid and Miller (1989) referred to "option values" of biodiversity. E. O. Wilson (1988) highlighted values for biodiversity reflecting our lack of knowledge about the components of life's variation and their importance to humankind. The MEA (2005a: 32) concluded that "the value individuals place on keeping biodiversity for future generations—the option value—can be significant." Gascon et al. (2015) reviewed the many, | Thank you for the thoughtful input. We have considered this where possible under the length limitations. |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          |   |  |



| Reviewer Name | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|---------------|---------------|-------------------|-------------------|---------------|---------------|---|---|
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | <b>Reference list (for comment on Ch.2 line 1-5051)</b>   |   |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Arrieta, Jesús M., Sophie Arnaud-Haond, and Carlos M. Duarte (2010) What lies underneath: Conserving the oceans' genetic resources. PNAS <a href="http://www.pnas.org/cgi/doi/10.1073/pnas.0911897107">www.pnas.org/cgi/doi/10.1073/pnas.0911897107</a>   | Agreed- included                                |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Barker, GM 2002 Phylogenetic diversity: a quantitative framework for measurement of priority and achievement in biodiversity conservation BIOLOGICAL JOURNAL OF THE LINNEAN SOCIETY Volume: 76 Issue: 2 Pages: 165-194  | Agreed- included                                |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Brooks TM, Akçakaya HR, Burgess ND, Butchart SHM, Hilton-Taylor C, Hoffmann M, Juffe-Bignoli D, Kingston N, MacSharry B, Parr M, Perianin L, Regan EC, Rodrigues ASL, Rondinini C, Shennan-Farpon Y, Young BE (2016) Analysing biodiversity and conservation knowledge products to support regional environmental assessments. Scientific Data 3: 160007. <a href="http://dx.doi.org/10.1038/sdata.2016.7">http://dx.doi.org/10.1038/sdata.2016.7</a>             | Agreed- included                                |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Brooks TM, Akçakaya HR, Burgess ND, Butchart SHM, Hilton-Taylor C, Hoffmann M, Juffe-Bignoli D, Kingston N, MacSharry B, Parr M, Perianin L, Regan EC, Rodrigues ASL, Rondinini C, Shennan-Farpon Y, Young BE (2016) Data from: Analysing biodiversity and conservation knowledge products to support regional environmental assessments. Dryad Digital Repository. <a href="http://dx.doi.org/10.5061/dryad.6gb90.2">http://dx.doi.org/10.5061/dryad.6gb90.2</a> | Agreed- included                                |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Bruford, Michael W., Neil Davies, Mohammad Ehsan Dulloo, Daniel P. Faith, Michele Walters (2017) Monitoring Changes in Genetic Diversity. In: The GEO Handbook on Biodiversity Observation Networks. pp 107-128. available at: <a href="http://link.springer.com/chapter/10.1007/978-3-319-27288-7_5/fulltext.html">http://link.springer.com/chapter/10.1007/978-3-319-27288-7_5/fulltext.html</a>  | Agreed- included                                |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Cadotte MW and JT Davies (2010) Rarest of the rare: advances in combining evolutionary distinctiveness and scarcity to inform conservation at biogeographical scales. Diversity and Distributions, 16, 376–385  | Agreed- included                                |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Chassagnon, Irène R., Claudia A. McCarthy,c, Yanni K.-Y. China, Sandy S. Pinedaa, Angelo Keramidasd, Mehdi Moblie, Vi Phamb,c, T. Michael De Silvab,c, Joseph W. Lynchd, Robert E. Widdopb,c, Lachlan D. Rasha,f,1, and Glenn F. Kinga, (2017) Potent neuroprotection after stroke afforded by a double-knot spider-venom peptide that inhibits acid-sensing ion channel 1a 1114 no. 14 3750–3755, doi: 10.1073/pnas.1614728114                                   | Agreed- included                                |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Daru, B.H., Bank, M. & Davies, T.J. (2015) Spatial incongruence among hotspots and  | Agreed- included                                |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | complementary areas of tree diversity in southern Africa. Diversity and Distributions, 21(7), 447-769-780.  | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Daru, B.H., Yessoufou, K., Mankga, L.T. & Davies, T.J. (2013) A global trend towards the loss of evolutionarily unique species in mangrove ecosystems. PLoS ONE, 8, e66686.   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · EDGE of Existence <a href="https://www.edgeofexistence.org/">https://www.edgeofexistence.org/</a> ZSL, London.  | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Faith, D. P. (1992). Conservation evaluation and phylogenetic diversity. Biological Conservation, 61, 1–10.   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | · Faith DP, Ferrier, S., Williams, KJ (2008) Getting biodiversity intactness indices right: ensuring that "biodiversity" reflects "diversity" Global Change Biology 14, 207-217.  | Noted, was considered in review of this section |



| Reviewer Name | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response  |
|---------------|---------------|-------------------|-------------------|---------------|---------------|--|---|
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Faith, D. P. (2011). Higher-Level Targets for Ecosystem Services and Biodiversity Should Focus on Regional Capacity for Effective Trade-Offs. <i>Diversity</i> 2011, 3, 1-7; doi:10.3390/d3010001  | Noted, was considered in review of this section     |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Faith Daniel P. (2014) Ecosystem services can promote conservation over conversion and protect local biodiversity, but these local win-wins can be a regional disaster. <i>Australian Zoologist Online</i> pp1-10. DOI 10.7882/AZ.2014.031 available at: <a href="http://catalog.ipbes.net/system/assessment/141/references/files/710/original/Faith_Australian_Zoologist_2014.pdf?1422606347">http://catalog.ipbes.net/system/assessment/141/references/files/710/original/Faith_Australian_Zoologist_2014.pdf?1422606347</a> | Noted, was considered in review of this section     |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Faith DP (2017) A general model for biodiversity and its value. in <i>The Routledge Handbook of Philosophy of Biodiversity</i> (Eds. J Garson, A Plutynski, S Sarkar)  | Noted, was considered in review of this section     |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | <a href="https://www.routledge.com/products/9781138827738">https://www.routledge.com/products/9781138827738</a>  | Noted, was considered in review of this section     |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Faith, D.P., Magallón, S., Hendry, A.P., Conti, E., Yahara, T., Donoghue, M.J., 2010. Ecosystem services: an evolutionary perspective on the links between biodiversity and human well-being. <i>Current Opinion in Environmental Sustainability</i> 2, 66–74.   | Noted, was considered in review of this section     |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Forest, F., Grenyer, R., Rouget, M., Davies, T.J., Cowling, R.M., Faith, D.P., Balmford, A., Manning, J.C., Proches, S., van derBank, M., Reeves, G., Hedderson, T.A. & Savolainen, V. (2007) Preserving the evolutionary potential of floras in biodiversity hotspots. <i>Nature</i> , 445, 757–760.  | Noted, was considered in review of this section     |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Francis (2015) Encyclical Letter <i>Laudato Si'</i> of the Holy Father Francis: On Care for Our Common Home [English language version]. The Vatican.   | Noted, was considered in review of this section     |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Gascon C., Thomas M. Brooks, Topiltzin Contreras-MacBeath, Nicolas Heard, William Konstant, John Lamoreux, Frederic Launay, Michael Maunder, Russell A. Mittermeier, Sanjay Molur, Razan Khalifa Al Mubarak, Michael J. Parr, Anders G.J. Rhodin, Anthony B. Rylands, Pritpal Soorae, James G. Sanderson, Jean-Christophe Vié (2015) "The Importance and Benefits of Species," <i>Current Biology</i> . 25: R431–R438.   | Noted, will be considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | González-Orozco, Carlos E. Laura J. Pollock, Andrew H. Thornhill, Brent D. Mishler, Nunzio Knerr, Shawn W. Laffan, Joseph T. Miller, Dan F. Rosauer, Daniel P. Faith, David A. Nipperess, Heini Kujala, Simon Linke, Nathalie Butt, Carsten Külheim, Michael D. Crisp & Bernd Gruber (2016) Phylogenetic approaches reveal biodiversity threats under climate change. <i>Nature Climate Change</i> 6, 1110-1114.   | Noted, will be considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Haskins, C. (1974) "Scientists Talk of the Need for Conservation and an Ethic of Biotic Diversity to Slow Species Extinction", <i>Science</i> , 184: 646-47.   | Noted, will be considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Isaac, N.J.B., Turvey, S.T., Collen, B., Waterman, C., Baillie, J.E.M., 2007. Mammals on the EDGE: conservation priorities based on threat and phylogeny. <i>PLoS One</i> 2, e296.   | Noted, will be considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Jetz, W., G. H. Thomas, J. B. Joy, D. W. Redding, K. Hartmann, and A. Ø. Mooers. 2014. Global distribution and conservation of evolutionary distinctness in birds. <i>Curr. Biol.</i> 24:919–930.  | Noted, was considered in review of this section     |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Laity, Tania, Shawn W. Laffan, Carlos E. González-Orozco, Daniel P. Faith, Dan F. Rosauer, Margaret Byrne, Joseph T. Miller, Darren Crayn, Craig Costion, Craig C. Moritz, Karl Newport (2015) Phylodiversity to inform conservation policy: An Australian example. <i>Science of The Total Environment</i> , Volume 534, 15 November, Pages 131-143   | Noted, was considered in review of this section     |

| Reviewer Name | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response  |
|---------------|---------------|-------------------|-------------------|---------------|---------------|--|---|
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Larsen, F.W., W.R. Turner, T.M.Brooks, et al. (2012). Conserving critical sites for biodiversity provides disproportionate benefits to people. PLoS One 7: e36971.   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Maclaurin J, Sterelny K (2008) What is biodiversity? University of Chicago Press.  | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-being: Biodiversity Synthesis. World Resources Institute, Washington, DC.   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Millennium Ecosystem Assessment, 2005. Chapter 4: Biodiversity. World Resources Institute, Washington, DC.   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Mouillot, D., Parravicini, V., Bellwood, D. R., Leprieur, F., Huang, D., Cowman, P. F., Albouy, C., Hughes, T. P., Thuiller, W., & Guilhaumon, F. (2016). Global marine protected areas do not secure the evolutionary history of tropical corals and fishes. Nature Communication,7, 10359.   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Mukherjee, Supratim, Rekha Seshadri, Neha J Varghese, Emiley A Eloie-Fadrosch, Jan P Meier-Kolthoff, Markus Göker, R Cameron Coates, Michalis Hadjithomas, Georgios A Pavlopoulos, David Paez-Espino, Yasuo Yoshikuni, Axel Visel, William B Whitman, George M Garrity, Jonathan A Eisen, Philip Hugenholtz, Amrita Pati, Natalia N Ivanova, Tanja Woyke, Hans-Peter Klenk & Nikos C Kyrpides (2017) 1,003 reference genomes of bacterial and archaeal isolates expand coverage of the tree of life Nature Biotechnology | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Nehring, K., and C. Puppe (2004). Modelling phylogenetic diversity. Resource and Energy Economics 26(2): 205–235.  | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Peel E. , Y. Cheng, J. T. Djordjevic, S. Fox, T. C. Sorrell & K. Belov (2016) Cathelicidins in the Tasmanian devil ( <i>Sarcophilus harrisii</i> ) Scientific Reports 6, Article number: 35019. doi:10.1038/srep35019  | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Pollock, Laura J. Wilfried Thuiller1 & Walter Jetz (2017) Large conservation gains possible for global biodiversity facets. Nature   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Roush, G. (1977) "Why save diversity?" Nature Conservancy News 21: 9-12.   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Safi K, Armour-Marshall K, Baillie JEM, Isaac NJB (2013) Global Patterns of Evolutionary Distinct and Globally Endangered Amphibians and Mammals. PLOS ONE 8(5): e63582.   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Slowinski Joseph B. and Brian I. Crother (1998) Is the PTP Test Useful? Cladistics 14, 297]302   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Sonnenburg1,* , Erica D., Samuel A. Smits1,* , Mikhail Tikhonov2, Steven K. Higginbottom1, Ned S. Wingreen3, and Justin L. Sonnenburg1 Diet-induced extinction in the gut microbiota compounds over generations Nature. 2016 January 14; 529(7585): 212–215  | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Thuiller, Wilfried Sébastien Lavergne, Cristina Roquet, Isabelle Boulangeat, Bruno Lafourcade & Miguel. B. Araujo (24 February 2011) Consequences of climate change on the tree of life in Europe Nature 470, 531–534 doi:10.1038/nature09705  | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Tonini, J. F. R., K. H. Beard, R. B. Ferreira, W. Jetz, and R. A. Pyron. 2016. Fully-sampled phylogenies of squamates reveal evolutionary patterns in threat status. Biol. Conserv. 204:23–31.   | Noted, was considered in review of this section |
| Faith         | Ch.2          | 1                 | 1                 | 119           | 5051          | Veron et al. (2016) Loss and conservation of evolutionary history in the Mediterranean Basin. BMC Ecol 16:43   | Noted, was considered in review of this section |

| Reviewer Name   | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response  |
|-----------------|---------------|-------------------|-------------------|---------------|---------------|--|---|
| Faith           | Ch.2          | 1                 | 1                 | 119           | 5051          | · WILKINSON, MARK, PEDRO R. PERES-NETO, PETER G. FOSTER, AND CLIVE B. MONCRIEFF (2002) Type 1 Error Rates of the Parsimony Permutation Tail Probability Test Syst. Biol. 51(3):524–527.  | Noted, was considered in review of this section   |
| Faith           | Ch.2          | 1                 | 1                 | 119           | 5051          | · Zhang Jian, Scott E. Nielsen, Youhua Chen, Damien Georges, Yuchu Qin, Si-Shuo Wang, Jens-Christian Svenning and Wilfried Thuiller (2016) Extinction risk of North American seed plants elevated by climate and land-use change. Journal of Applied Ecology 2016.   | Noted, was considered in review of this section   |
| Faith           | Ch.2          | 1                 | 1                 | 119           | 5051          | · Yessoufou, Kowiyou, Barnabas H. Daru <sup>2,3</sup>   Respinah Tafirei <sup>1</sup>   Hosam O. Elansary <sup>4</sup>   Isaac Rampedi <sup>1</sup> (2017) Integrating biogeography, threat and evolutionary data to explore extinction crisis in the taxonomic group of cycads Ecology and Evolution. 2017;7:2735–2746. | Noted, was considered in review of this section   |
| Faith           | Ch.2          | 1                 | 1                 | 119           | 5051          | · Yessoufou K. *, G.H. Stoffberg (2016) Biogeography, threats and phylogenetic structure of mangrove forest globally and in South Africa: A review. South African Journal of Botany 107 114–120.   | Noted, was considered in review of this section   |
| Faith           | Ch.2          | 2                 | 40                | 2             | 40            | this section seems to suggest that all NCP are ecosystem services. Not true.   | Accepted and further elaborated   |
| Richard Corlett | Ch.2          | 3                 | 68                | 3             | 69            | Biodiversity is not a reflection of culture although, partly, vice versa.  | Accepted, Changed text to say 'reflecting the regions diverse communities and biodiversity' |
| K.N.Ninan       | Ch.2          | 3                 | 68                | 4             | 123           | Paras preceding the key message 1 need to be cut down in size.   | Accepted. Changed text to say 'reflecting the regions diverse communities and biodiversity' |
| K.N.Ninan       | Ch.2          | 3                 | 69                | 3             | 70            | 'high quality' ecosystem services ? What do you mean by high quality ecosystem services ? Or in the context of your previous statement i.e. "...rich depth of cultural landscapes....biodiversity" do you mean rich diversity of or multiple ecosystem services ?  | Accepted. Deleted 'high quality'  |
| Rahul Goswami   | Ch.2          | 3                 | 71                | 3             | 73            | avoid creation of new acronyms such as NCP and GQL as these add to an already cluttered group of acronyms used in the report   | NCP is an IPBES term. GQL is not an IPBES term and has been deleted throughout the chapter  |
| Richard Corlett | Ch.2          | 3                 | 77                | 3             | 77            | Implications FOR not 'on'. Elsewhere, consequences FOR not 'on'.   | Accepted changed throughout as proposed   |
| K.N.Ninan       | Ch.2          | 3                 | 78                | 3             | 79            | What do you mean by 'viable ecosystems'? Economists use the term 'Viability' to denote profitability.Or do you mean to say 'sustainable ecosystems' that can continue to maintain and provide a flow of ecosystem services/benefits to people ?  | Accepted, changed to 'sustainable ecosystems'   |
| K.N.Ninan       | Ch.2          | 3                 | 78                | 6             | 268           | Is it necessary to provide such a detailed executive summary. Would it not be better to provide key messages of the chapter in the form of a few bullet points which can be easily read and enable a reader to grasp the main findings of the chapter ?  | Accepted, Executive summary now follows IPBES format with bolded headings and traceability  |
| Rahul Goswami   | Ch.2          | 4                 | 117               | 4             | 118           | a better understanding of the all-round dependence ...   | Accepted, Changed deeper to better  |
| Rahul Goswami   | Ch.2          | 4                 | 120               | 4             | 121           | more efforts are required to support economic growth in The Asia–Pacific region however what is meant by 'growth'?   | We have made no change, as authors have assessed and believe the text is clear              |
| Henry Scheyvens | Ch.2          | 4                 | 121               | 4             | 121           | Suggest changing economic growth to inclusive economic growth, as there can be economic growth that only benefits certain segments of the population.  | Thank you, added 'inclusive'  |
| Rahul Goswami   | Ch.2          | 4                 | 127               | 4             | 131           | good paragraph please retain emphasis  | Thank you, noted.   |
| Richard Corlett | Ch.2          | 4                 | 127               | 4             | 131           | This sets the tone for the chapter - that it is largely about IPLCs, and that nobody else counts. I think this is a mistake - see my first comment.  | Thank you, the text has been revised to cover a broader content                             |

| Reviewer Name              | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response  |
|----------------------------|---------------|-------------------|-------------------|---------------|---------------|--|---|
| Margarita N. Lavidis       | Ch.2          | 4                 | 131               | 4             | 131           | I reiterate my comments as found in Chapter 1 regarding the use of (established but incomplete); (well-established); (established but inconclusive) etc. Please see my comments in Chapter 1 (re-pasted here):<br>=> I realized at this point that the use of the following: (Well-established); (Established but incomplete); (Established but inconclusive) are all over the document. If I correct every other sentence for that, I would not finish APR Regional Assessment for review. Therefore, I suggest to authors to limit from using these vague, confusing and contradicting phrases i.e. established but inconclusive??, especially when the sentence is a compound one. The reader is left confused with which one is established and which one is inconclusive. Also at which context it is established or inconclusive, spatially? temporally? or for which element in the sentence? Its also distracting for readers. I understand these 'phrases' are IPBES' but if its going to be used especially heavily in this document, it has be ensured that at the beginning these phrases are well-explained and defined. I came across these 'phrases' since the first sentence of Chapter 1 page 3 but only in page 36 under Communication of Uncertainty was the meaning of the 'phrases defined. There are also a number of grammar errors which external expert reviewers were guided not to comment on but which errors affect the intended message of each sentence and or paragraph. For example, missing 'as' ; 'to' etc. in between main words. There are also misspelled words. | Accepted - complying with IPBES terminology   |
| K.N.Ninan                  | Ch.2          | 4                 | 138               | 4             | 138           | bespoke' approach. What is this ?  | Accepted, replaced 'bespoke' with 'unique characteristics of'   |
| Henry Scheyvens            | Ch.2          | 4                 | 154               | 4             | 156           | This statement does not fit with the following paragraph which explains that changes in value systems can be both positive and negative for BES.   | Accepted changed with edit  |
| K.N.Ninan                  | Ch.2          | 4                 | 165               | 5             | 171           | People's attitude to biodiversity conservation across localities and cultural landscapes vary as rightly pointed out here. A study by Ninan et al (The economics of biodiversity conservation-valuation in tropical forest ecosystems, Earthscan, 2007) notes that while coffee growers emphasised ecological functions to justify biodiversity conservation, tribals and farmers cum pastoralists in other localities emphasised its livelihood functions. This calls for a local approach to biodiversity conservation as opposed to a national approach which may overlook these local contexts.  | Noted, thank you for the input  |
| Kwan-Sung Song (NFP Korea) | Ch.2          | 5                 | 173               | 5             | 180           | Overall, the paper provided a lot of information about the current state or value of NCP in AP region. However, we need to know the trend in the use of NCP (all & each) in AP & sub-AP region, (i.e., the quantity of a particular NCP indicator decreased).  | Accepted- added new contributions to the regional assessment by assessing the trends in ES. See subsection 2.3.1 in particular. |
| Kwan-Sung Song (NFP Korea) | Ch.2          | 5                 | 183               | 5             | 187           | I was not able to find any evidence that the one third of ecosystem value dropped in AP region in the paper. It needs to be elaborated accurately with stronger evidence.  | Accepted - was revised when the executive summary was revised.  |
| Tatsuya Horikiri           | Ch.2          | 5                 | 183               | 5             | 188           | It would be better to replace the word "value" with "provision". This sentence, as I read, notes that ES provision is in reduction due to ecosystem decline as a result of human activities through, such as, land use change. "Value system" change in the region is one thing, but "(economic/material) valuation" or quantification of ES is another thing .  | Accepted - was revised when the executive summary was revised.  |

| Reviewer Name               | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|-----------------------------|---------------|-------------------|-------------------|---------------|---------------|---|---|
| Margarita N. Lavides        | Ch.2          | 5                 | 184               | 5             | 185           | It is important to emphasize that depletion does not happen only at ecosystem level. Species or taxonomic level and even functional trait level depletion are happening as well. Thus, I suggest the following: ".....which follows the global trends of ecosystem and species depletion primarily caused by extensive and intensive land use change and overexploitation". Additional Notes: The major causes of ecosystem and species depletion here are based on the paper by Dulvy et al 2003 which discussed the major causes of species depletion for marine species and ecosystems and mentioned habitat degradation/land use change for terrestrial species and ecosystems. | Accepted - was revised when the executive summary was revised.                                  |
| K.N.Ninan                   | Ch.2          | 5                 | 185               | 5             | 188           | "...ecosystem services values can drop....." What is the empirical evidence to support this statement. Generally when a resource becomes scarce one would expect its price or value to increase.  | Accepted - was revised when the executive summary was revised.                                  |
| Shamik Chakraborty          | Ch.2          | 5                 | 186               | 5             | 186           | Not only valuation but some integrated efforts that shows values and biodiversity together  | Accepted - was revised when the executive summary was revised.                                  |
| Tatsuya Horikiri            | Ch.2          | 5                 | 199               | 5             | 200           | We humans are all highly dependent on Nature reardless of region. It could be better to use such expression as "with many communities which directly depend on local BES," instead.   | We have not changed this, as ES come from local and non-local sources                           |
| Margarita N. Lavides        | Ch.2          | 5                 | 199               | 6             | 221           | All of examples (case studies) here are terrestrial-based. There are a lot of case studies which can be used for marine-based case studies which show the diversity and complexity of marine socio-ecological systems with high level of dependency on nature/marine ecosystems and biodiversity. For example, there are many country level or regional level USAID initiatives where case studies have been written which can be sourced out for these marine-based case studies.  | We have not changed this. There are 2 marine case studies see Fiji and Australia (Barrier Reef) |
| Henry Scheyvens             | Ch.2          | 5                 | 200               | 5             | 200           | "Agriculture is the main livelihood provider in the region". Need to provide regional evidence (not just case studies) to support this statement, i.e. what % of the population is engaged in agriculture in AP countries.  | Noted - information not found   |
| Shamik Chakraborty          | Ch.2          | 5                 | 200               | 5             | 200           | Biodiversity in the agricultural areas a) conserving biodiversity in agricultural areas and b) low key agriculture/sustainable agriculture in near natural areas/important biodiversity areas/natural park areas. See for instance: <a href="https://comdeksproject.files.wordpress.com/2014/10/communities-in-action-comdeks-web-v2.pdf">https://comdeksproject.files.wordpress.com/2014/10/communities-in-action-comdeks-web-v2.pdf</a> and <a href="https://comdeksproject.files.wordpress.com/2016/11/comdeks-ii-case-study-publication-web-version-final.pdf">https://comdeksproject.files.wordpress.com/2016/11/comdeks-ii-case-study-publication-web-version-final.pdf</a>   | Accepted changed in edit  |
| Pham Ngoc Bao               | Ch.2          | 5                 | 201               | 5             | 201           | "fresh water" or "freshwater": should be consistent across the report. "freshwater" should be an appropriate word   | Accept, changed to 'freshwater' throughout  |
| Joanne Perry NZ Focal point | Ch.2          | 5                 | 213               | 5             | 213           | the statement made in relation to people in rural areas is only relevant in some regions.   | Accepted, changed to 'some ' rural areas  |
| Rahul Goswami               | Ch.2          | 5                 | 213               | 5             | 214           | In rural areas people are largely dependent on natural resources due to the economic compulsions arising out of poverty Not quite. Use of natural resources is often mistakenly conflated with being poor. The report should steer clear of making such connections   | Accepted, deleted 'due to the economic compulsions arising out of poverty'                      |
| Pham Ngoc Bao               | Ch.2          | 6                 | 227               | 6             | 227           | "ground water" or "groundwater": should be consistent across the report. "groundwater" should be an appropriate word  | Accepted, changed throughput to 'groundwater'   |
| Tatsuya Horikiri            | Ch.2          | 6                 | 232               | 6             | 235           | "and sustainable use" could be added after "conservation". They are two of the three objectives of CBD  | Accepted  |
| Rahul Goswami               | Ch.2          | 6                 | 240               | 6             | 242           | important. should be emphasised   | Accepted  |

| Reviewer Name   | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|-----------------|---------------|-------------------|-------------------|---------------|---------------|---|---|
| Tian Yu         | Ch.2          | 6                 | 261               | 6             | 261           | 2.2.4 need several paragraph as a review for the whole section  | accepted  |
| Rahul Goswami   | Ch.2          | 6                 | 264               | 6             | 266           | not "could not be recorded" but were not in a manner that corresponded with the forest tribals' concept of rights. This refusal to record was most visible during the British colonial era when forests were seen as sources of cheap/free wood for colonial infrastructure of railways and telegraph   | Accepted, deleted 'could not be recorded'   |
| K.N.Ninan       | Ch.2          | 7                 | 298               | 7             | 303           | Instead of mentioning " a section... a further section...etc. why not mention the section numbers. say section 1 discusses, section 2 analyses and so on.   | Accepted, changed to numbering sections   |
| K.N.Ninan       | Ch.2          | 7                 | 305               | 7             | 305           | "....People's benefits to nature" What do you mean by this ? Illustrate this with examples .  | Accepted, all references to NBP have been changed to NCP                                  |
| Prakash Nelliya | Ch.2          | 7                 | 313               | 22            | 957           | The property right issues related to biodiversity to be incorporated in this part.<br>For example, forest, river, estuary, ocean etc., are common properties (generally state is having the ownership right and communities enjoy their user rights). Hence, these biodiversity spots and the biological resources from these sources experience market failure or distortions and over extractions. Species from these ecosystems may extinct and the system may experience the 'tragedy of the commons' .<br>Price determination for the goods and services derived from this ecosystems/biodiversity may be a huge challenge.  | Accepted  |
| David González  | Ch.2          | 8                 | 317               | 8             | 318           | The citation for IPBES/3/INF/7 is not correct, it should be IPBES/4/INF/13 - check all throughout the document  | Accepted- Changed to (Pascual et al., 2017).  |
| David González  | Ch.2          | 8                 | 317               | 8             | 318           | Principle and fundamental belief are the same, I suggest looking into Pascual et al., 2017 Valuing nature's contributions to people to clearly state this first phrase.   | Accepted: Pascual cited and corrected accordingly   |
| David González  | Ch.2          | 8                 | 317               | 8             | 329           | Important to clearly differentiate between values systems and values. Value systems being the mechanisms through which values are derived and determined and values being those stated in the text. I suggest changing the order first the second paragraph and second the first paragraph  | Accepted: Great suggestion. The order is changed as suggested.                            |
| David González  | Ch.2          | 8                 | 318               | 8             | 320           | This anthropocentric / biocentric should be brought into the discussion all throughout the text. Also, I suggest using non-anthropocentric instead of biocentric as this is the concept used in the IPBES guide on values   | Accepted, biocentric replaced by non-anthropocentric throughout the chapter               |
| David González  | Ch.2          | 8                 | 320               | 8             | 323           | What is referred here as value systems - interpreted as collective form of people's values revealed by actual decision making - could be 'shared values' according to the IPBES approach to multiple values. To be consistent I suggest using the latter.   | accepted. changed this to be consistent with the IPBES approach.                          |
| Prakash Nelliya | Ch.2          | 8                 | 325               | 8             | 329           | Can we consider these values as 'non-marketed services of biodiversity as intrinsic (social) values'?   | accepted, Intrinsic values have been included in this paragraph aligned with Pascual 2017 |
| David González  | Ch.2          | 8                 | 331               | 8             | 331           | The section requires an introduction and also to be linked to the IPBES concept of multiple worldviews (which lead to multiple values). This can be reviewed in Diaz et al (2015) The IPBES Conceptual Framework - The inclusive nature of the CF, in terms of benefits, stakeholders, knowledge systems and worldviews, necessarily requires the consideration of multiple value systems. Value systems vary among individuals within groups, and across groups at various temporal and spatial scales (e.g. some nations tend to be more dominated by value systems that prioritize individual rights and others by value systems that prioritize collective and community-level values) [60] - | Accepted- this has now been included  |

| Reviewer Name           | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|-------------------------|---------------|-------------------|-------------------|---------------|---------------|--|--|
| Richard Corlett         | Ch.2          | 8                 | 331               | 10            | 453           | 2.2.2 is mostly just a rather incoherent list, with excessive emphasis on India. It needs to be more balanced and more coherent.   | accepted, changed during edit  |
| Prakash Nelliya         | Ch.2          | 8                 | 333               | 8             | 341           | Economic reform (traditional to modern transformation) induced value change on biodiversity to be assessed in physical terms. Few examples are useful.   | Accepted- the cases of value changes induced by economic development were already presented in the subsection 2.2.4. |
| India NFP               | Ch.2          | 8                 | 335               | 8             | 335           | Generic sweeping statement. May be deleted.  | Accepted, deleted this sentence  |
| Shukla Acharjee         | Ch.2          | 8                 | 340               | 8             | 340           | values system  | Accepted, deleted one of the 'value systems' in this sentence  |
| Rahul Goswami           | Ch.2          | 8                 | 353               | 8             | 360           | yes to "potentially leading to more sustainable ... resource production and consumption" but "have little concern for the nature and its contributions to the people" is not limited to the urbanised and economically/socially better off, as unconcern about environment is often brought on amongst farmers and fisherfolk for example as a result of an economics that rewards misuse and overuse  | Accepted, deleted this sentence  |
| India NFP               | Ch.2          | 8                 | 357               | 8             | 360           | This finding is questionable and insinuating the scientific community, middle classes, citizens in India. Citizen's movements and of civil society whose actions prove otherwise. There are several examples from many cities. So the statement that scientific community, educated classes, middles classes, etc in India have no concern about nature is highly questionable and gives a biased picture. Since this observation is not based on an article in a peer reviewed journal or peer reviewed book, this sentence may be deleted.   | Accepted, deleted this sentence  |
| K.N.Ninan               | Ch.2          | 8                 | 357               | 8             | 360           | This finding is questionable and insinuating the scientific community, middle classes, citizens in India. Citizen's movements and of civil society in cities such as Bangalore against cutting of trees for road infrastructure projects and protection of lakes from encroachment from builders and land mafia and dumping of sewage and municipal wastes prove otherwise. There are similar examples from other cities. See also the study by Chopra et al, 1997 (cited in Ninan et al, 2007) where scientists willingness to pay for conservation of the Keoldadeo national park, a Ramsar site in Rajasthan was positive and significant. So the statement that scientific community, educated classes, middles classes, etc in India have no concern about nature is highly questionable and gives a biased picture. Is this finding based on an article in a peer reviewed journal or peer reviewed book ? | Accepted, statement deleted  |
| Rahul Goswami           | Ch.2          | 9                 | 366               | 9             | 390           | I am very glad to see this discussion about calendrical systems. A problem I have often pointed out to central planners and administrators is that the current agricultural crop year (July to June) is purely administrative and pays no heed to local seasonal periodicities, with the result being that the local calendars are used to punctuate festivals but rarely guide activity any more  | Accepted, no action required   |
| David González          | Ch.2          | 9                 | 379               | 9             | 390           | Very interestign paragraph, make sure you connect this with a holistic approach to values. You can see how management strategies of biodiverisy and ecosystem services change their values according to holistic approaches which use different indicators, and provide evidence of change.  | accepted   |
| Prof. Pramod W. Ramteke | Ch.2          | 9                 | 381               | 9             | 381           | H. Chan, remove H  | Accepted, corrected  |
| David González          | Ch.2          | 9                 | 405               | 9             | 408           | No evidence of status and trends in this paragraph   | Accepted, deleted  |
| Prof. Pramod W. Ramteke | Ch.2          | 10                | 415               | 10            | 415           | Kumar, B.M, Singh, A.K. remove B,M A,K   | Accepted, corrected  |



| Reviewer Name           | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|-------------------------|---------------|-------------------|-------------------|---------------|---------------|--|--|
| Prof. Pramod W. Ramteke | Ch.2          | 10                | 418               | 10            | 418           | Maddugoda P remove P   | Accepted, corrected  |
| Prof. Pramod W. Ramteke | Ch.2          | 10                | 422               | 10            | 422           | Sharma, Aggarwal, Kumar 2014 remove p. 3   | Accepted, corrected  |
| Prof. Pramod W. Ramteke | Ch.2          | 10                | 433               | 10            | 433           | Remove p.6   | Accepted, corrected  |
| Government of Japan     | Ch.2          | 10                | 436               | 10            | 453           | (L436-437) We could not locate the content "Value systems across...in the Asia-Pacific region" in ESCAP, 2005. Please specify.<br><br>(L443-447) Huang et al., 2013 and H. Zhu, Deng, Zhu, & He, 2016 only mention about rise in people's awareness towards nuclear power or radioactive exposure and NOT towards nature. Therefore, this sentence ("Perceived risks lead people...(...exposure has not occurred)") should be deleted.<br><br>(L438-443) Whether or not the two psycho-social factors are related with biodiversity and ecosystem services in the context of values systems is questionable.<br><br>(L436-453) If questions and concerns above cannot be explained and elaborated, this paragraph should be deleted. | Comment 1: The source is in text and reference list<br>Comment 2: Accepted, this sentence was deleted<br>Comment 3: The authors believe this is relevant |
| Prof. Pramod W. Ramteke | Ch.2          | 10                | 447               | 10            | 447           | H. Zhu- remove H   | Accepted, corrected  |
| Prof. Pramod W. Ramteke | Ch.2          | 10                | 448               | 10            | 448           | C. K. Chan - remove C. K.  | Accepted, corrected  |
| Prof. Pramod W. Ramteke | Ch.2          | 10                | 451               | 10            | 451           | T. Frosyth - remove T.   | Accepted, corrected  |

| Reviewer Name        | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|----------------------|---------------|-------------------|-------------------|---------------|---------------|--|--|
| Margarita N. Lavides | Ch.2          | 11                | 471               | 12            | 558           | The following should be added in this section: f) The predominantly Catholic The Philippines: Pope Francis's Laudato Si, a text of such landmark significance that it may well become one of the most important sources of Catholic Social Teaching since its inception with Pope Leo XIII's Rerum Novarum in 1891. Both the title of the encyclical ("On Care for Our Common Home") and its opening quote from St. Francis's canticle establish the focus of this text. In the introductory section, Francis, following his thirteenth-century namesake, calls the earth our "common home", which is like our sister and our mother. But we are damaging this familial relationship as we harm the environment. In so doing, we are damaging our relationship with other humans, particularly those least equipped to defend themselves: the poor and future generations. We are forgetting our interconnectedness with the earth and with those around and ahead of us who depend on our good stewardship of the gift of creation. Given the universal nature of our common home, Francis makes it clear that the encyclical is addressed to not only members of the Church but is a vehicle to "enter into dialogue" with all people who are "united by the same concern". Such a wide target audience explains the immense range of sources the encyclical draws on. The document looks to St. Francis of Assisi and St. Bonaventure, as well as St. Thomas Aquinas, but also to Eastern Christian traditions. It even quotes a Sufi Mystic. Twentieth-century thinkers Teilhard de Chardin and Romano Guardini deserve special mention. Secular documents such as the Rio Declaration from 1992 and the 2000 Earth Charter are referred to as well. The reader is also struck by the many references to previous papal writings, particularly those of St. John Paul II and Benedict XVI. The relationship between Francis and his predecessors on ecology is strong. After a comprehensive introduction, the encyclical divides into six chapters, each examining different aspects of the rupture between humans and creation and the prospects for healing this relationship (Lifted from Henry Longbottom, SJ <a href="https://thejesuitpost.org/2015/06/an-overview-of-laudato-si/">https://thejesuitpost.org/2015/06/an-overview-of-laudato-si/</a> ) For pdf download weblink of Laudato Si: <a href="https://laudatosi.com/watch">https://laudatosi.com/watch</a> | Thank you for the comment which is relevant as there are many followers fo the Catholic faith within the Phillipines and the APR. Reference has been made to this in the text. |
| Tatsuya Horikiri     | Ch.2          | 11                | 487               | 11            | 487           | It might be more "natural" for Japanese readers to have the translation of nature symbiosis as "自然との共生", rather than "自然共生"  | Accepted, corrected  |
| Government of Japan  | Ch.2          | 11                | 489               | 11            | 489           | The word "parasitism" is probably not appropriate to explain the ecological concept of symbiosis as it has a negative nuance. It originates from the word "parasite" which means "an organism which lives in or on another organism (its host) and benefits by deriving nutrients at the other's expense" (Oxford Dictionary of English, Second Edition) so its nuance is exploiting others rather than "living together".   | Accepted, 'parasitism' has been deleted and a citation added   |
| Nirmal S. K. Harsh   | Ch.2          | 11                | 502               | 11            | 509           | There are sacred groves in India which are integral to the consrvation goals by the IPLCs (may add few lines here)   | This has not been reflected because sacred groves are mentioned in multiple locations throughout the chapter see 2.3.2.3   |
| Rahul Goswami        | Ch.2          | 11                | 503               | 11            | 503           | while valuable paragraphs on the spiritual basis of the human-nature connection has been given here, care has to be taken about some statements such as "Upanishads (a collection of philosophical texts forming the theoretical basis for the Hindu religion)" - in this example the term "theoretical basis" should not be used. Likewise in page 21 concerning animism and Islam.   | Accepted 'theoretical basis' has been deleted  |

| Reviewer Name           | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|-------------------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| Nirmal S. K. Harsh      | Ch.2          | 12                | 511               | 12            | 517           | Animals like cow, dog, monkey, bird (Jatayu in Ramayana), etc. have important connection to Hindu mythology and lifestyle. Similarly some festivals observed by the Hindus like Basant Panchami in Spring, Haryali Teej and Nag Panchami in Rainy season, are connected to nature .(may add here)   | Accepted: Added  |
| Nirmal S. K. Harsh      | Ch.2          | 12                | 516               | 12            | 517           | May add here owl with goddess Lakshmi   | Accepted: Added  |
| Prof. Pramod W. Ramteke | Ch.2          | 12                | 531               | 12            | 531           | Remove p. 414   | Accepted, corrected  |
| David González          | Ch.2          | 12                | 559               | 14            | 660           | The section should be summarized highlighting the drivers of change, perhaps classifying them in economic, biophysical, socio-cultural, holistic, health related. An assessment of this could in fact be made as these are only examples. And then one or two examples are pertinent. As it is presented right now it is very interesting but it is not completely in line with the needs of an assessment. | This section has been presented in accordance with IPBES classifications |
| Richard Corlett         | Ch.2          | 13                | 572               | 13            | 575           | This is an important point but supported by a 17 year old citation. Is there something more recent?   | Accepted, A more recent citation has been added                          |
| Prof. Pramod W. Ramteke | Ch.2          | 13                | 575               | 13            | 575           | Remove Ronald   | Accepted, corrected  |
| Thomas Brooks           | Ch.2          | 13                | 591               | 13            | 610           | Good examples - retain  | Accepted, no action required   |
| Prof. Pramod W. Ramteke | Ch.2          | 13                | 592               | 13            | 592           | First line add 2014 after Tisdell   | Accepted, corrected  |
| Thomas Brooks           | Ch.2          | 13                | 594               | 13            | 594           | Cite Burnett, Winter & Martin (2016) <a href="http://www.iucnredlist.org/details/16727/0">http://www.iucnredlist.org/details/16727/0</a> for the fact that the species is Endangered  | Accepted, The suggested reference is cited in the text.                  |
| Thomas Brooks           | Ch.2          | 13                | 607               | 13            | 608           | The species is Critically Endangered (cite Woinarski & Burbidge 2016; <a href="http://www.iucnredlist.org/details/9564/0">http://www.iucnredlist.org/details/9564/0</a> )   | Accepted : The suggested reference is cited in the text.                 |
| Rahul Goswami           | Ch.2          | 14                | 631               | 14            | 631           | say nuclear testing   | This has not been followed, as topic is about the Nuclear Cycle          |
| NFP of China            | Ch.2          | 14                | 640               | 14            | 640           | Change "Taiwan" to "Taiwan,China", "Hong Kong"to "HongKong, SAR"  | Accepted, changed both terms throughout doc                              |
| NFP of China            | Ch.2          | 14                | 640               | 14            | 640           | change "Taiwan"to "Taiwan, China"   | Accepted, corrected  |
| NFP of China            | Ch.2          | 14                | 641               | 14            | 641           | change"Hong Kong"to "Hong Kong, SAR"  | Accepted, corrected  |
| Tian Yu                 | Ch.2          | 15                | 688               | 15            | 688           | 2.2.4.1all the section were using the case study of China, and it is completely duplicate with the 2.3.2.1section, suggest delete.  | Accepted, deleted 2.2.4.1  |
| Richard Corlett         | Ch.2          | 16                | 729               | 18            | 798           | This is readable but all citations are >10 years old, suggesting it has been recycled without updating. It needs to be updated.   | Accepted: updated  |
| Rahul Goswami           | Ch.2          | 17                | 745               | 17            | 746           | Figure 2. 2 is confusing and probably misrepresents views and customs   | Accepted Figure 2.2 has been deleted                                     |
| David González          | Ch.2          | 18                | 755               | 18            | 759           | This paragraph is not connected to Biodiversity or ES connect or take away.   | Accepted. Deleted  |
| David González          | Ch.2          | 18                | 764               | 18            | 767           | Why use an example from Mexico for an APR assesment?  | Accepted. Deleted  |
| Thomas Brooks           | Ch.2          | 18                | 775               | 18            | 786           | Good examples - retain  | Thank you.   |
| Margarita N. Lavides    | Ch.2          | 18                | 800               | 19            | 807           | These should be followed by at least one empirical analysis example (after the last sentence of this paragraph).  | Accepted   |
| Richard Corlett         | Ch.2          | 19                | 803               | 19            | 803           | Here and elsewhere, 'normative theories' and sentences which mention these will be meaningless to 98% of our hoped-for readers.   | Accepted   |

| Reviewer Name         | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response  |
|-----------------------|---------------|-------------------|-------------------|---------------|---------------|--|---|
| Margarita N. Lavides  | Ch.2          | 19                | 808               | 19            | 813           | The Model mentioned and the message of the whole paragraph should be followed by a concrete example.   | Accepted  |
| Prakash Nelliya       | Ch.2          | 19                | 815               | 19            | 836           | Indigenous peoples and local communities' knowledge (traditional knowledge) in bio-prospecting and product development (as information rent) also need to be captured in this section.   | Accepted, added   |
| David González        | Ch.2          | 19                | 838               | 20            | 869           | The whole section is not referring so much to ILK Values as it is referring to indigenous and local knowledge. Take this into consideration as ILK Values would have to be made explicit or the concept should be taken away from the subtitles  | Accepted:made more explicit   |
| IPBES NFP - Australia | Ch.2          | 19                | 840               | 19            | 843           | Proposed text to clarify that TK under the Protocol is through the USE of GRs and associated TK and also that it is not only benefits but securing appropriate PIC for access. The Nagoya Protocol on Access to genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity aims to <b>promote the third objective of the Convention on Biological Diversity by providing a strong basis for greater legal certainty and transparency for both users and providers of genetic resources. In addition, the Protocol provides for provisions on access to traditional knowledge associated with genetic resources to also strengthen the ability of IPLCs to benefit from the use of their knowledge.</b> <del>share these benefits in a fair and equitable way to enhance legal certainty and transparency to the access of genetic resources and associated traditional knowledge.</del> | Accepted: corrected   |
| U.S. government       | Ch.2          | 19                | 840               | 19            | 843           | This sentence should be deleted as Nagoya addresses access to and benefit sharing from the utilization of genetic resources and TK associated with genetic resources, not intellectual property.   | Accepted -corrected and removed intellectual property and replaced with more appropriate text |
| K.N.Ninan             | Ch.2          | 19                | 845               | 19            | 849           | Example is given of the Kani tribals in the western ghats of India. How beneficial was this agreement for the tribals ? This is cited as an example and success story of ABS (access and benefit sharing). If the reviewer's memory is correct Kani tribals didn't get the promised benefits and lost interest in the venture.What about its sustainability and replicability ? The studies based on this case study give a mixed picture. Vijesh Krishna and Unai Pascual are among the researchers who studied the kani tribes's example.  | Agreed- included a reference and updated this according to the comment                        |
| K.N.Ninan             | Ch.2          | 19                | 854               | 19            | 854           | The ILK study of the Mukkuva community... To which country does this community belong ?  | Accepted, "South India" added.  |
| Margarita N. Lavides  | Ch.2          | 20                | 854               | 20            | 869           | The ILK case study of the Mukkuva community as mentioned here should be followed by at least one concrete example.   | Apologies, we do not understand the comment.  |
| Rahul Goswami         | Ch.2          | 20                | 871               | 20            | 893           | this paragraph on Iran will become clearer with a line that describes the arid and semi-arid conditions prevalent in Iran for which reason water justice systems came about  | Thank you, a sentence has been added to reflect this  |
| Margarita N. Lavides  | Ch.2          | 20                | 879               | 20            | 879           | The following should be deleted: "...Iranian traditional local organizations surprise us". (Note: Author's feelings should not be part of this document).  | Accepted - corrected  |
| Richard Corlett       | Ch.2          | 21                | 904               | 21            | 922           | China is a good example for this. Not only does traditional Chinese medicine still thrive but so do Dai, Tibetan etc. traditions, all with state help. I can choose to be treated in a Dai hospital by professionally trained Dai doctors.   | Accepted: added additional text and reference to reflect this                                 |
| Margarita N. Lavides  | Ch.2          | 21                | 913               | 21            | 922           | There is so much discussions on Indian examples, not only in this paragraphs in this Chapter, the authors should give also examples of other APR countries. For traditional herbal medicines, China should have rich documented examples of this. Similarly, other biodiversity-rich countries like Indonesia or the Philippines should have documented examples of traditional herbal medicine practice especially for forest dwelling indigenous groups.   | Accepted: added some on Chinese   |

| Reviewer Name              | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response  |
|----------------------------|---------------|-------------------|-------------------|---------------|---------------|--|---|
| Henry Scheyvens            | Ch.2          | 21                | 942               | 21            | 943           | Countries that have introduce public procurement policies for verified legal and sustainable wood products include New Zealand, Japan, the UK, Germany, France and the Netherlands. Also, the US, EU and Australia have all introduced laws that prohibited the trade in illegally harvested wood products. See:<br>Scheyvens, H., Lopez-Casero, F., Gene, E. I., & Hyakumura, K. (2010). Conserving tropical forests: Reforming the tropical forest products trade towards sustainable consumption and production. In IGES (ed.), Sustainable consumption and production in the Asia-Pacific region: Effective responses in a resource constrained world. Hayama: IGES. | Noted- The Gulf of Mannar has been mapped in the Figure under this section, we may not add details in the texts due to limitation of space and have to be selective for the case studies per country. |
| Eunkyung JANG              | Ch.2          | 22                | 959               | 48            | 1886          | Estimated values of ecosystem services vary by the kind. For this reason, cases for each ecosystem services should be chosen through a systemic review. A systemic review study on ecosystem services value can provide the basis for the choice of ecosystem services case studies and can improve the reliability of assessment.   | Accepted- added new contributions to the regional assessment by presenting the trends in ES including the economic values.  |
| MDFortes                   | Ch.2          | 22                | 961               | 25            | 1001          | The great number of definitions and categorizations of ecosystem services need to be briefly elucidated in this section, and decide on what this assessment considers as the most acceptable and why. In addition, may the topic on Blue carbon be more emphasized in this section?  | Accepted- A statement describing the classification systems of ecosystem services was added.  |
| Faith                      | Ch.2          | 22                | 963               | 25            | 1001          | this section seems to suggest that all NCP are ecosystem services. Not true.   | This is not the intent.   |
| Margarita N. Lavides       | Ch.2          | 22                | 970               | 22            | 970           | The following is unnecessary and should be deleted: " These aspects are elaborated in next section".   | Accepted, deleted the sentence.   |
| IPBES Secretariat/TSU      | Ch.2          | 22                | 972               | 22            | 987           | Please align the description of the classification of nature's contributions to people with that of the Standard Text provided for all assessments, with the three broad categories of regulating contributions, material contributions, and non-material contributions (and not the two broad groups of material and non-material benefits). (Please see separate Word file of the Standard Text)   | Accepted- edited as suggested   |
| Margarita N. Lavides       | Ch.2          | 22                | 979               | 22            | 980           | I suggest the following: For example, food, milk, fibre, water etc. from terrestrial ecosystems; fish and other seafood etc. from marine and coastal regions.  | Agreed, and a sentence added to address the reviewer's concern.   |
| IPBES Secretariat/TSU      | Ch.2          | 23                | 999               | 22            | 1000          | Table 2. 1 - the right hand side column on "type of benefit" needs to be updated to "type of contribution", with the categories 1-10 being regulating, categories 11-14 being material, and 15-18 being non-material contributions.  | Accepted- corrected classificatons as suggested.  |
| Margarita N. Lavides       | Ch.2          | 23                | 999               | 23            | 999           | Table 2. 1 (Line 1): The following should be added for Number 1 for Brief explanation and some examples: natural refuge for adult fish and invertebrates   | Accepted- incorporated into the text as suggested.  |
| Kwan-Sung Song (NFP Korea) | Ch.2          | 23                | 999               | 25            | 1001          | Table 2. 1: The table should compare the categories of NCP between the IPBES and the AP region assessment used in this paper.  | Accepted- amended cataogies as above  |
| Rahul Goswami              | Ch.2          | 23                | 999               | 25            | 1001          | table on "nature's contributions to people used in IPBES assessments" needs at least another paragraph of explicatory text   | Accepted- A statement describing the classification systems of ecosystem services was added.  |

| Reviewer Name        | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|----------------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| Margarita N. Lavides | Ch.2          | 24                | 1134              | 24            | 1143          | For an aquatic and marine ecosystems and biodiversity close link to indigenous culture and spirit for the Philippines, a good example is by the Tagbanua indigenous group of Coron, Palawan. The beauty of this example is that the indigenous practice is legally bounded by national law and a legal instrument. Please refer to the following References: 1.Capistrano, R.C.G. and Charles A.T. 2012. Indigenous rights and coastal fisheries: A framework of livelihoods, rights and equity. Ocean and Coastal Management 69: 200-209.<br>2.Capistrano, R.C.G., 2010. Reclaiming the ancestral waters of indigenous peoples in the Philippines: the Tagbanua experience with fishing rights and indigenous rights. Marine Policy 34 (1), 453e460.<br>3.Sampang AG. The Calamian Tagbanwa ancestral domain (Coron Island, Palawan, Philippines): evaluation of traditional fishing practices towards biodiversity conservation and sustainability. Los Banos, Laguna: World Fish Center; 2007.   | Noted and considered in chapter review   |
| Richard Corlett      | Ch.2          | 26                | 1002              | 26            | 1002          | As elsewhere, these studies seem to have been selected at random. If not, the logic should be explained.  | A table (Table 2.3.4) was prepared to show the distribution of cases selected.   |
| K.N.Ninan            | Ch.2          | 26                | 1002              | 33            | 1291          | Section 2.3.2: This whole section is of differential quality and largely descriptive which one can understand given that it is written by many authors. However there can be some consistency. Some are very descriptive (sometimes too long with too many details, at times boring too), others cite studies of the economic values of ecosystem services (e.g. Iran, Indonesia) but not for other countries of the AP region. The quality of the section could be improved if a summary table is given of the economic values of various ecosystem services for countries and sub regions within the AP region. This is not difficult to do. Authors may refer to a recent study by Ninan and Inoue published in Ecological Economics, Volume 93, 2013 on: Valuing forest ecosystem services-what we know and what we don't. The article gives overall ecosystem values for forest ecosystems and for individual ecosystem services esp. intangible benefits for many countries in the AP region including China, Japan, India, Indonesia, Iran, Malaysia and others in terms of 2010 International US dollars. Another good source is CBD Technical Report 4 on The Value of Forest Ecosystems by David Pearce (can be downloaded from the CBD web site) which gives a global survey of ecosystem value estimates for various countries and regions from around the world covering provisioning, regulating, supporting and cultural services). Two recent indepth case studies of national parks in India and Japan, (i.e. by Ninan and Andreas Kontoleon on Nagarhole National Park in India, Ecosystem Services, Volume 20, 2016, pp. 1-14 and Ninan and Inoue on a forest ecosystem reserve in Japan (Ecosystem Services, Volume 5, 2013) estimate the value of several intangible benefits such as soil and water conservation, carbon sequestration, recreation, nutrient cycling, air pollution absorption, etc. Also a book (Ninan et al, The Economics of Biodiversity Conservation- Valuation in Tropical Forest Ecosystem Services, Earthscan, 2007; Routledge 2016 gives a review of economic values of protected areas/Ramsar sites in India and the economic value of Asiatic elephants in India, Thailand, Sri Lanka etc. Giving a Summary Table as suggested above will help sharpen the discussion in this section, reduce the size of this largely descriptive section and be more reader-friendly | Accepted- A systematic review on economic valuation of ecosystem services in the AP region was done and the result is presented in the subsection 2.3.3. |

| Reviewer Name   | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|-----------------|---------------|-------------------|-------------------|---------------|---------------|---|---|
| David González  | Ch.2          | 26                | 1008              | 26            | 1008          | This table could also include the Types of values that are being used in each case study when they are  | Accepted- A table (Table 2.3.4) was prepared to show various types of values represented in the cases selected.     |
| K.N.Ninan       | Ch.2          | 26                | 1008              | 26            | 1009          | Table 2.2: Why restrict the case study for India to only lakes when there are several studies pertaining to terrestrial ecosystems such as forests in India? See for instance a recent indepth study on Nagarhole national park in the Western Ghats biodiversity hotspot where the authors have estimated the value of various ecosystem services as well as forest disservices (e.g. forest fires, wild life damages). This study by Ninan and Andreas Kontoleon is published in Ecosystem Services, Vol.20, 2016, pp.1-14. | This has not been reflected - the assessment of regional scale can not cover all cases for a country such as India. |
| K.N.Ninan       | Ch.2          | 26                | 1008              | 26            | 1010          | In table 2.2 under northeast asia you started with Japan and then China. But in the discussion below your case study starts with China. Better to elaborate on the case studies in the same order as given in the above table i.e. Japan and then China.Or shift the order in the table, China followed by Japan  | Accepted - Corrected as recommended   |
| Eunkyung JANG   | Ch.2          | 26                | 1010              | 28            | 1037          | Since China's case of ecosystem services value has been analyzed for the period 2000-2010, I recommend to update it with recent studies through systemic review of studies on ecosystem services valuation.   | Could not find more recent study at the national scale.   |
| Eunkyung JANG   | Ch.2          | 28                | 1039              | 28            | 1062          | There is a recently published study on ecosystem services valuation regarding water resources and Māori(Sini Miller et. al, 2015, Estimating indigenous cultural values of freshwater: A choice experiment approach to Māori values in New Zealand, Ecological Economics 118 (2015) 207–214). Recent study would deliver updated basis. A systemic review is recommended for updating these recent researchesand improve the reliability of assessment.   | Accepted -the case study noted and a systematic review was done as suggested.                                       |
| Nakul Chettri   | Ch.2          | 28                | 1064              | 28            | 1064          | A case study from Koshi Tappu, Nepal could add value to represent Nepal. Citation: Sharma B, Rasul G, Chettri, N. (2015). The Economic Value of Wetland Ecosystem Services: Evidence from Koshi Tappu Wildlife Reserve, Nepal. Ecosystem Services. 12:84-93.  | The case study was noted and a systematic review was done as suggested.   |
| K.N.Ninan       | Ch.2          | 28                | 1066              | 28            | 1073          | Reference for the Bhutan study is missing.  | Accepted- added   |
| Prakash Nelliya | Ch.2          | 28                | 1066              | 30            | 1130          | Under the head of 'Value of ecosystem services', the Indian Case study (Wular Lake) highlighted different goods and services provided by the lake and not done any valuation. The Total Economic Value (TEV)of the lake may be estimated.   | We cannot justify the estimation of the TEV for a single lake for the assessment                                    |
| K.N.Ninan       | Ch.2          | 29                | 1116              | 29            | 1116          | Please give a sub title: 'Sacred Groves in South Asia' before the discussion here   | Added a sub-title as suggested  |
| Rahul Goswami   | Ch.2          | 29                | 1116              | 30            | 1130          | sacred groves are very often controlled or ruled over by a snake (cobra) or serpent family. These snakes are propitiated as guardian powers. Stringent rules are observed concerning the material in the grove, whose biological value is high because of the diversity of plant species it harbours, which are spread nearby through natural pollination   | Unfortunately, space is limited to include the detailed description of sacred groves in India.                      |



| Reviewer Name | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response  |
|---------------|---------------|-------------------|-------------------|---------------|---------------|--|---|
| R K Pundir    | Ch.2          | 30                | 1131              | 30            | 1131          | <p><b>Chilika Lake</b></p> <p>Chilika lake is a brackish water lagoon, spread over the Puri, Khurda and Ganjam districts of Odisha state on the east coast of India, at the mouth of the Daya River, flowing into the Bay of Bengal, covering an area of over 1,100 km<sup>2</sup>. It is the largest coastal lagoon in India and the second largest lagoon in the world. The lake is an ecosystem with large fishery resources. It sustains more than 150,000 fisher-folk living in 132 villages on the shore and islands. The lagoon hosts over 160 species of birds in the peak migratory season. Birds from as far as the Caspian Sea, Lake Baikal, Aral Sea and other remote parts of Russia, Kirghiz steppes of Mongolia, Central and southeast Asia, Ladakh and Himalayas come here. These birds travel great distances; migratory birds probably follow much longer routes than the straight lines, possibly up to 12,000 km, to reach Chilika Lake. According to a survey, 45 percent of the birds are terrestrial in nature, 32 percent are waterfowl, and 23 percent are waders. The lagoon is also home to 14 types of raptors. Around 152 rare and endangered Irrawaddy dolphins have also been reported. Plus, the lagoon supports about 37 species of reptiles and amphibians.</p> <p>(<a href="https://en.wikipedia.org/wiki/Chilika_Lake">https://en.wikipedia.org/wiki/Chilika_Lake</a>)</p>   | Unfortunately, space is limited to include the detailed description of a lake in India. |
| R K Pundir    | Ch.2          | 30                | 1131              | 30            | 1131          | <p><b>Kolleru Lake</b></p> <p>Kolleru Lake is one of the largest freshwater lakes in India located in state of Andhra Pradesh 15 kilometers away from the city of Eluru. Kolleru is located between Krishna and Godavari deltas. The lake is fed directly by water from the seasonal Budameru and Tammileru streams, and is connected to the Krishna and Godavari irrigation systems by over 67 major and minor irrigation canals. Many birds migrate here in winter, such as Siberian crane, ibis, and painted storks. The lake was an important habitat for an estimated 20 million resident and migratory birds, including the grey or spot-billed pelican (<i>Pelecanus philippensis</i>). The lake was declared as a wildlife sanctuary in November 1999 under India's Wildlife Protection Act of 1972, and designated a wetland of international importance in November 2002 under the international Ramsar Convention. The wildlife sanctuary covers an area of 308 km<sup>2</sup>. Kolleru Lake under Ramsar Convention (allowing local communities (Here: Vaddi Community) to continue their occupation of culture fish and caught fish) covers 90,100 hectares (222,600 acres) and Kolleru Lake under Wildlife Sanctuary covers 166,000 acres (67,200 ha). Satellite images taken on February 9, 2001 by the Indian remote sensing satellite found that approximately 42% of the 245 km<sup>2</sup> lake was occupied by aquaculture, while agriculture had encroached another 8.5%. The area under aquaculture consisted of 1050 fish ponds within the lake and 38 dried-up fish ponds, which together covered an area of 103 km<sup>2</sup></p> <p>(<a href="https://en.wikipedia.org/wiki/Kolleru_Lake">https://en.wikipedia.org/wiki/Kolleru_Lake</a>)</p> | Unfortunately, space is limited to include the detailed description of a lake in India. |
| Thomas Brooks | Ch.2          | 30                | 1136              | 30            | 1143          | An excellent additional example of cultural ecosystem services could be added here from van der Ploeg et al. (2011) <i>Journal of Integrative Environmental Sciences</i> 8: 287-298  | accepted- added one sentence as suggested.  |
| Rahul Goswami | Ch.2          | 30                | 1165              | 31            | 1182          | it will be useful to mention the immense losses caused by the proliferation of palm oil cultivation in Malaysia and Indonesia - the clearing of forest and the terrible loss of animal, bird, insect and forest flora have been studied extensively. This is an example of the valuation proposition being stood on its head in both countries that have positive examples of PES  | Noted as part of review   |

| Reviewer Name                  | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|--------------------------------|---------------|-------------------|-------------------|---------------|---------------|---|---|
| Thomas Brooks                  | Ch.2          | 32                | 1245              | 32            | 1251          | Good example - retain   | Noted   |
| Thomas Brooks                  | Ch.2          | 33                | 1273              | 33            | 1291          | Good example - retain   | Noted   |
| Joanne Perry NZ<br>Focal point | Ch.2          | 33                | 1282              | 33            | 1282          | refers to JD 740 million - it would be useful to include USD as a comparative.  | accepted- Corrected as recommended  |
| K.N.Ninan                      | Ch.2          | 33                | 1282              | 33            | 1291          | For the benefit of an international audience please indicate as as to how much Jordanian currency is equal to 1 US \$   | accepted -Corrected as recommended  |
| Rahul Goswami                  | Ch.2          | 33                | 1295              | 35            | 1355          | the economic valuation studies in APR show that there is ample cause for suspecting bias in what is measured and what results are obtained from measuring, and therefore that valuation is a discipline that is still very much adolescent. I suggest the difference between economic valuation and the social/spiritual values referred to in earlier pages be at least outlined here, because both methods treat one commons in two different ways  | Accepted- this comment was well incorporated by including both economic valuation and cases representing different values (see Table 2.3.4).                            |
| Tatsuya Horikiri               | Ch.2          | 34                | 319               | 34            | 319           | Legend of figure 2.4 is showed in Japanese language without specifying any ES types even in Japanese.   | Accepted- A new figure is now clear with new contents.  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 34                | 1319              | 34            | 1319          | Figure 2.4 seems to be located incorrectly, suggest relocating below Table 2.3 where it is referred to.   | Accepted- A new figure is now clear with new contents.  |
| David González                 | Ch.2          | 34                | 1319              | 34            | 1320          | Figure 2. 4: The axis need to have a title to be understandable, this is especially the case for the 'x' axis   | Accepted- A new figure is now clear with new contents.  |
| K.N.Ninan                      | Ch.2          | 34                | 1319              | 34            | 1320          | Figure 2. 4: Japanese or Chinese words are used in the vertical axis for 1-11. Remove this as this report is in English. What are 1-18 in the horizontal axis of the figure and also 0-70 in the Vertical axis. These need to be indicated in the figure rather than leaving it to readers to imagine what these stand for ? Or mention in notes to the figure  | Accepted- A new figure is now clear with new contents.  |
| Kwan-Sung Song<br>(NFP Korea)  | Ch.2          | 34                | 1319              | 34            | 1320          | Figure 2. 4:<br>a) There is no label of x & y axis (probably number of studies at y axis)<br>b) The number of ecosystem types does not match the ones in the table on right (18 vs. 11).<br>c) Not much delineated of the chart (For example, why the number of studies is the highest in the 12th ecosystem type (even unknown for the type 12).)  | Accepted- A new figure is now clear with new contents.  |
| David González                 | Ch.2          | 34                | 1322              | 34            | 1322          | The whole section needs to be better developed, this is one of the elements policy makers are waiting to see. Also, there needs to be further understanding of the trends in economic values per NCPs and an attempt to explain or make more evident the lack of values for certain NCPs? why is this happening? what types of NCPs are we referring to here? Also, don't forget to put this in the context of the multiple values approach of IPBES. What does this economic value means to the detriment of other values? | accepted- new contents were developed with contributions from additional contributing authors who are experts in the field.   |
| Kwan-Sung Song<br>(NFP Korea)  | Ch.2          | 34                | 1324              | 35            | 1349          | According to the key message, the economic value of ecosystem services in AP is high (page 5), but the table 2.3 and the lines do not prove the high value. It should come up with TEV (total economic value) or any particular ecosystem service value in AP, and compare with the value of nature in the world referred in the paper (line 1324 to 1330).   | accepted-new contents were developed to provide the actual trends of ES values in AP region. See subsection 2.3.1   |
| Joanne Perry NZ<br>Focal point | Ch.2          | 34                | 1328              | 34            | 1328          | it is not clear what is being referred to at the end of the sentence ie..... is \$1.25 trillion/yr both in 2007 \$US.   | Accepted- These are updated in new versions in the sytematic review of economic values - see section 2.3.3.4 The monetary values of ecosystem goods and services in APR |

| Reviewer Name               | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|-----------------------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| K.N.Ninan                   | Ch.2          | 34                | 1332              | 34            | 1334          | Table 2.3: Which are the average values of a biome for the AP region as a whole ? In addition to a summary table for the AP region as a whole it would be useful to give a summary table for different countries as suggested earlier since ecosystem services values will vary across countries and sites (and even within countries) and also depending upon the methods and values used to value ecosystem service values. It would be useful to present the range of estimated values or the minimum and maximum values since ecosystem services values show wide variations as stated above. Costanza et al, 1997 and 2014: de Groot et al (Ecosystem Services, 2012) Ninan and Inoue (Ecological Economics, 2013) while presenting such estimated values have shown the wide range of estimated values for different ecosystem services across countries and regions. Please list out the 18 ecosystem services evaluated in a note to the table for the benefit of readers. Is this table 2.3 based on Costanza et al or Ahn et al, 2017 which, of course, is not listed in the references at the end of the chapter | Accepted- new contents are added based on a systematic review of economic valuation of ES in AP region. See sub-section 2.3.3.   |
| K.N.Ninan                   | Ch.2          | 34                | 1335              | 34            | 1335          | The ecosystem services 1-18 what are these ? Neither mentioned in the Figure 2.4 or in this table 2.3 although you state: The ecosystem services in the rows... are those in Figure 2.4 !   | accepted - corrected the legend in the figure mentioned.   |
| David González              | Ch.2          | 35                | 1342              | 35            | 1345          | What is this value, high but of how much and with what confidence level?  | Accepted- the statement of the comment was rewritten based on a systematic review result. See subsection 2.3.3.  |
| K.N.Ninan                   | Ch.2          | 35                | 1351              | 35            | 1352          | Figure 2. 5: Number of valuation studies upto 2009 only. Is data not available at least upto 2015 or 2016 ? Also what is the source for this ? The study Ahn et al, 2017 is not included in the references of the chapter ?   | Accepted- the statement of the comment was rewritten based on a systematic review result. See subsection 2.3.4.  |
| Richard Corlett             | Ch.2          | 36                | 1373              | 36            | 1388          | I think 'Status and trends in values' should be in Chapter 3, where it is not currently covered.  | We think human society trends are in the scope of our chapter, with biophysical trends being covered in chapter 3  |
| K.N.Ninan                   | Ch.2          | 36                | 1375              | 36            | 1375          | This is the second order draft and Table 2.4 is reported to be under preparation as also a section  | Accepted- new contents were developed to provide the actual trends of ES values in AP region. See subsection 2.3.1   |
| Joanne Perry NZ Focal point | Ch.2          | 36                | 1383              | 36            | 1384          | refers to NZ have potential more stability for ES goods and service. The issue in NZ is not so much further ES conversion but the intensification and the resultant impact of already converted systems i.e intensification of farming leading to further land degradation via increase nitrate and phosphate loadings along with increasing competition for water resources.   | Accepted - The estimate for the total global ecosystem services in 2011 is \$125 trillion/yr both in 2007 \$US. It is estimated the loss of ecosystem services value could be \$4.3–20.2 trillion/year from 1997 to 2011 due to land use change. |
| David González              | Ch.2          | 36                | 1390              | 36            | 1390          | Use this section linked to the above section 2.3.3.3 to explain first the lack of information and then the need for valuation.  | Accepted- a new para on the rationale of economic valuation of ES is developed.(subsection 2.3.4.1)  |
| K.N.Ninan                   | Ch.2          | 37                | 1405              | 37            | 1405          | What was the discount rate used for calculating NPVs?   | Accepted- revised the sentence with additional information on the discount rate.   |

| Reviewer Name               | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|-----------------------------|---------------|-------------------|-------------------|---------------|---------------|---|---|
| Henry Scheyvens             | Ch.2          | 37                | 1425              | 37            | 1428          | It may be worth mentioning that important work to develop the concept of sustainable landscapes and landscape approaches has been undertaken. This includes the "Bowral Checklist," a checklist framework for ecological management developed by landscape ecologists and conservation biologists at a meeting in Bowral, New South Wales, Australia in March 2006; the "Ten Principles of Landscape Approach (Sayer et al. 2013)," developed through a series of workshops and extensive consultations and published in 2012; the "Elements of Integrated Landscape Management," developed by several international environmental non-governmental organisations and published in 2015 (Deneir et al. 2015); and the 7 principles for landscape approaches proposed by Scheyvens et al. (2017). You can find all the relevant references in: Promoting the Landscape Approach in Asia-Pacific Developing Countries: Key Concepts and Ways Forward<br>IGES Policy Brief 37<br>Authors: Henry SCHEYVENS Rajib SHAW Isao ENDO Jintana KAWASAKI Pham NGOC BAO Binaya Raj SHIVAKOTI Hiromitsu SAMEJIMA Bijon Kumer MITRA Yasuo TAKAHASHI<br><a href="https://pub.iges.or.jp/pub/promoting-landscape-approach-asia-pacific">https://pub.iges.or.jp/pub/promoting-landscape-approach-asia-pacific</a> | Noted, was considered in review of this section   |
| Margarita N. Lavides        | Ch.2          | 38                | 1461              | 38            | 1462          | The following should be added as example for number 2): Birdlife International works for the conservation of three Asian Flyways. It covers West Pacific Flyway, East Asian- Australasian Flyway and Central Asian Flyway, stretching across 22 countries.  | Agreed and the information on Birdlife was added  |
| Joanne Perry NZ Focal point | Ch.2          | 38                | 1473              | 38            | 1473          | It is not clear what is intended by this first sentence - please clarify  | Agreed and removed the sentence commented   |
| Tatsuya Horikiri            | Ch.2          | 38                | 1480              | 47            | 1803          | There is no explanation in the document what do TBCAs and TBA stand for.  | Agreed - corrected to TBCA consistently across the sub-chapter  |
| Joanne Perry NZ Focal point | Ch.2          | 39                | 1480              | 39            | 1480          | remove the word problems and carry the sentence on so that it reads ... "with may challenges that..." this then allows for both positive and negative aspects to be identified.   | Agreed - corrected to "TBCAs are complex social-ecological systems with many challenges"  |
| Joanne Perry NZ Focal point | Ch.2          | 39                | 1484              | 39            | 1484          | I would question the use of the word inadequate in front of energy supply as this is not the case in all countries in the AP.   | Accepted and reframed to "increasing energy demand"   |
| Joanne Perry NZ Focal point | Ch.2          | 39                | 1493              | 39            | 1493          | insert subheading Riverbasins   | This paragraph is part of the overall text in the sub-section. It is too general to be put under a sub-heading  |
| Joanne Perry NZ Focal point | Ch.2          | 39                | 1510              | 39            | 1510          | insert sub heading illegal wildlife trade.  | This paragraph is part of the overall text in the sub-section. It is too general to be put under a sub-heading  |
| Joanne Perry NZ Focal point | Ch.2          | 39                | 1511              | 39            | 1511          | remove the words major challenge - i.e. it should read " is an issue that is a major challenge".....  | Accepted - revised to "Illegal wild life trade in TBCA, i.e. domestic, regional, and international illegal trades, is an issue with major challenges to be addressed" |
| Tatsuya Horikiri            | Ch.2          | 39                | 1511              | 39            | 1524          | It is difficult to identify what the main problem is (i.e. Domestic illegal trade or regional illegal trade among countries in Southeast Asia, or international illegal trade originating from Southeast Asia, or all or some of them ?)  | Accepted - revised to "Illegal wild life trade in TBCA, i.e. domestic, regional, and international illegal trades, is an issue with major challenges to be addressed" |

| Reviewer Name                  | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|--------------------------------|---------------|-------------------|-------------------|---------------|---------------|---|---|
| Joanne Perry NZ<br>Focal point | Ch.2          | 39                | 1516              | 39            | 1516          | change dilemma to challenge for consistency   | Accepted - change to "challenge"  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 40                | 1526              | 40            | 1526          | insert sub heading Dust storms  | This paragraph is part of the overall text in the sub-section. It is too general to be put under a sub-heading  |
| NFP of China                   | Ch.2          | 40                | 1533              | 40            | 1533          | Change "Taiwan" to "Taiwan,China",  | Accepted  |
| NFP of China                   | Ch.2          | 40                | 1533              | 40            | 1533          | change "Taiwan"to "Taiwan, China"   | Accepted  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 40                | 1540              | 40            | 1540          | it would be useful to include soe analysis of the estimate cost of ES change in relation to this issue  | Comment not relevant - no cost estimation indicated in the sentence   |
| Joanne Perry NZ<br>Focal point | Ch.2          | 40                | 1541              | 40            | 1541          | insert sub heading Forest fire haze   | This paragraph is part of the overall text in the sub-section. It is too general to be put under a sub-heading  |
| K.N.Ninan                      | Ch.2          | 40                | 1560              | 48            | 1886          | Section 2.3.7.4: The discussion in this section on Transboundary Areas (TBAs) in the AP region is quite informative. However there is scope to reduce the size of the section. A summary table listing these TBAs, countries falling within the TBA, their salient features and problems/challenges should be included in this section for the benefit of readers.  | Accepted - A table is added to summarize the TBCA in the AP Region  |
| Prakash Nelliya                | Ch.2          | 40                | 1560              | 48            | 1886          | The Gulf of Mannar (lies between the south-eastern tip of India and the west coast of Sri Lanka in the Coromandel Coast region) with considers its rich marine biodiversity can be a case.  | Noted- The Gulf of Mannar has been mapped in the Figure under this section, we may not add details in the texts due to limitation of space and have to be selective for the case studies per country. |
| Rahul Goswami                  | Ch.2          | 40                | 1560              | 48            | 1886          | concerning transboundary areas, regions and landscapes, I suggest that the section acknowledge also that whereas shared geographies and common uses of nature within those shared geographies is found amongst communities on either side of a political boundary, the "transboundary" character of a region is usually not a characteristic that concerns any local community or settlement (village or village cluster for example). This also means that the transboundary cooperation and approach tends to be scientific and administrative, but not locally contextual because the scale of any transboundary region is far too large to be of local significance. This has implications relating to participation of residents in the region on subjects that pertain to their resource use, and also relating to the use of traditional knowledge or ILK that can be useful for such cooperation. | Noted. Transboundary section has been reviwed and edited  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 40                | 1564              | 40            | 1564          | change to read, APR has some of the worlds most significant TBA.  | The current version of sentence has similar understanding with the reviewer's suggestion  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 40                | 1570              | 40            | 1570          | refers to TBL? Should in be TPA as in the heading? Alternatively change the heading to TBL as many of theexamples refer to TBL's.   | This paragraph is part of the overall text in the sub-section. It is too general to be put under a sub-heading  |
| Prof. Pramod W. Ranteke        | Ch.2          | 40                | 1576              | 40            | 1576          | Remove Golam  | Corrected.  |
| IPBES NFP - Australia          | Ch.2          | 41                | 1577              | 41            | 1578          | World Population at June 2017 is aprpx. 7.5b therefore 1b is not half. Asia's 10 largest rivers including the Brahmaputra, Ganges, Indus, Mekong, Yangtze, and Yellow Rivers, which are a lifeline for more than a billion people, almost half of humanity (Beniston, 2013).  | Accepted - "almost half of humanity" was removed  |

| Reviewer Name               | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|-----------------------------|---------------|-------------------|-------------------|---------------|---------------|--|--|
| Prof. Pramod W. Ramteke     | Ch.2          | 41                | 1582              | 41            | 1582          | Remove G. and Prakash Chandra  | Accepted. Corrected.   |
| K.N.Ninan                   | Ch.2          | 42                | 1597              | 42            | 1598          | Figure 2. 8: Please mention details of the source of this figure i.e. which issue of National Geographic, year etc.?   | Accepted - issue and year added  |
| Pham Ngoc Bao               | Ch.2          | 43                | 1622              | 43            | 1622          | Mekong region stretches from southern China through Myanmar, Laos, Thailand, Cambodia and Vietnam. Thus, "China" is missing here   | Accepted - information on additional country added (China)   |
| Prof. Pramod W. Ramteke     | Ch.2          | 43                | 1644              | 43            | 1644          | Remove K. G.   | Accepted,Corrected.  |
| Joanne Perry NZ Focal point | Ch.2          | 45                | 1711              | 45            | 1743          | While this is a good example of a transboundary watershed, it would be useful to include an assessment of this examples ES value, along with an estimate of use of the rivers, their volume and the economic cost of an alternative.   | This has not been reflected, because no valuations have been identified on the transboundary areas in AP.  |
| Joanne Perry NZ Focal point | Ch.2          | 46                | 1749              | 46            | 1794          | are there any estimates of value in relation to the specific programme and policies that can be added to make examples more comprehensive. While there are all good descriptions of transboundary areas, there is no estimate of the value of examples of the policy options that can be learnt from.  | This has not been reflected, because no valuation available many of the transboundary areas in AP. Wherever they were available have been discussed otherwise not mentioned. |
| Siri Quade                  | Ch.2          | 46                | 1753              | 46            | 1754          | Scientific American stating not Coral Triangle but "the Verde Island Passage (VIP), this narrow stretch of water sandwiched between the Philippine islands of Luzon to the north and Mindoro to the south is considered the most biodiverse marine ecosystem on the planet" but that is depending on the data used   | Corrected as recommended   |
| Joanne Perry NZ Focal point | Ch.2          | 47                | 1807              | 47            | 1831          | This is a better example of the issue and options for management - countries can then use this as a model for managing similar values.   | Acknowledged   |
| IPBES NFP - Australia       | Ch.2          | 47                | 1815              | 47            | 1815          | for Amur tigers, Rhinos, Snow Leopards, Green turtles, Olive ridley <b>Turtles</b> , Whales, Dolphins, Leatherback <b>Turtles</b> ,  | Corrected as recommended   |
| NFP of China                | Ch.2          | 47                | 1827              | 47            | 1827          | Change "the People's Republic of China" to "China"   | Accepted: Corrected as recommended   |
| NFP of China                | Ch.2          | 47                | 1827              | 47            | 1827          | change "the People's Republic of China" to "China"   | Accepted: Corrected as recommended   |
| K.N.Ninan                   | Ch.2          | 47                | 1827              | 47            | 1830          | Why is there need to mention <b>Republic of</b> Afghanistan, <b>Republic of</b> India, <b>Republic of</b> Pakistan, etc. for all the countries listed here. Just mention the list of countries i.e. Afghanistan, India, Pakistan, China, etc. within the snow leopard range without stating <b>Republic of</b> , etc.. This will help cut down the size of this largely descriptive section. My suggestion to include a summary table listing all the TBAs will be very useful for the readers given that this section is largely descriptive and detailed. The survival of snow leopards and other such umbrella or charismatic species also depends upon the availability of adequate prey population. No mention or light is thrown on this aspect which constitutes a threat to the survival and sustainability of such species. | Accepted. Corrected as recommended   |
| Joanne Perry NZ Focal point | Ch.2          | 48                | 1851              | 48            | 1861          | Again a clear statement of what this means for management of BES is needed here.   | Accepted, corrected  |
| Thomas Brooks               | Ch.2          | 48                | 1877              | 48            | 1877          | Change "Red Listed" to "species assessed as threatened on the IUCN Red List".  | Accepted, corrected  |
| Thomas Brooks               | Ch.2          | 48                | 1877              | 48            | 1878          | Reference is BirdLife International (2016) <a href="http://www.iucnredlist.org/details/full/22692167/0">http://www.iucnredlist.org/details/full/22692167/0</a> . Global population estimate is actually 3,050.   | Accepted This reference is added as a footnote   |

| Reviewer Name                  | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|--------------------------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| Prakash Nelliya                | Ch.2          | 49                | 1891              | 49            | 1950          | Under the head of “Nature’s Contributions to people and good quality of life in Asia Pacific region”, along with Nature’s Contributions directly to the poor (income/livelihood source, employment generation, food and health security etc.) indirect contributions for the middle class and the urban poor also to be highlighted.  | Accepted: We accept this view. "People" include middle class and urban poor also                   |
| Binaya Raj Shivakoti           | Ch.2          | 49                | 1904              | 49            | 1907          | Water-Food-Energy nexus here is misleading as the assessment is about biodiversity/ecosystem; In Hoff (2011), nature and society is used rather in general sense. Better for authors to incorporate rather specific content than general statements;  | Noted: The assessment keeps ecosystem services and biodiversity under the broad category "nature". |
| Richard Corlett                | Ch.2          | 49                | 1911              | 49            | 1918          | You cannot use the present tense for studies done 31 and 29 years ago. It must be made clear that these were historical - or they should be removed. The one thing that we are sure about in the APR is that it has changed in the last 2-3 decades!  | Accepted and corrected.  |
| Margarita N. Lavides           | Ch.2          | 49                | 1913              | 49            | 1917          | The statistics cited for 1980s are too old-- might be too obsolete by now, e.g. Jodha 1986; Campbell 1988). Although historical figures are important but it should be cited also in the context of more recent figures to provide temporal perspective.  | Accepted   |
| Joanne Perry NZ<br>Focal point | Ch.2          | 49                | 1913              | 49            | 1921          | there is no reference to pacific islands where communities are highly reliant on ES   | Noted - more case studies included on the pacific islands  |
| Pham Ngoc Bao                  | Ch.2          | 49                | 1935              | 49            | 1935          | Need some further explanations on tradeoffs between water-water, food-food, energy-energy???  | yes accepted   |
| Binaya Raj Shivakoti           | Ch.2          | 50                | 1948              | 50            | 1950          | Not clear why the author(s) need to use this less relevant sentence for IPBES   | Accepted: edited   |
| Binaya Raj Shivakoti           | Ch.2          | 50                | 1952              | 50            | 1952          | Not clear why (Case study - Lao (Lao People’s Democratic Republic) is necessary here  | Accepted this view   |
| Richard Corlett                | Ch.2          | 50                | 1952              | 50            | 1988          | I understand the problem with finding material on Laos but you cannot just repeat inaccurate government information. Yes, they have passed laws, but they have not been enforced.   | Accepted- reference to enactment deleted   |
| U.S. government                | Ch.2          | 50                | 1975              | 50            | 1976          | There is no international treaty on ABS; recommend either deleting the sentence or using the correct title for Nagoya, if that is the treaty to which the drafter is referring.   | Accepted- deleted  |
| Richard Corlett                | Ch.2          | 51                | 1992              | 51            | 1992          | There is not 'marine life' in Laos: it is landlocked!   | Accepted- deleted  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 51                | 2001              | 51            | 2004          | is there any estimate of the cost of this impact?   | Noted  |
| Binaya Raj Shivakoti           | Ch.2          | 51                | 2009              | 51            | 2009          | 2.4.2 Water security section is not well drafted and misses discussion on water related ecosystems and their contribution to livelihoods  | Agreed-tried to improve  |
| Prakash Nelliya                | Ch.2          | 51                | 2009              | 54            | 2064          | In the water security section: the linkages between ‘Water and Biodiversity’ to be established as we cannot imagine one without the other. Further, the Integrated Water Resources Management (IWRM) for ensuring the biodiversity and ecosystem goods and services also may be highlighted.  | Yes accepted   |
| Binaya Raj Shivakoti           | Ch.2          | 51                | 2011              | 51            | 2014          | I do not think people will read IPBES to find a definition of water security (Grey & Sadoff, 2007). Recommended for deletion  | Yes accepted   |
| Shamik Chakraborty             | Ch.2          | 51                | 2016              | 51            | 2016          | Massive decrease in the food security and biodiversity loss due to mono crop and cash crop cultivation, degradation of artisanal fisheries which not only provide food for a significant number of population, especially in the poorer regions, it also discards less and have lesser bycatch etc. Also increase in cultured fisheries that directly affects marine biodiversity through coastal LUC, mangrove destruction etc. All these relate to food insecurity and here they can be added | Yes accepted   |



| Reviewer Name                  | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|--------------------------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| Binaya Raj Shivakoti           | Ch.2          | 51                | 2018              | 51            | 2019          | <b>Globally</b> 2.8 billion people live in areas of high water 2018 stress and 1.2 billion live in areas with absolute physical water scarcity (Rodriguez, Delgado, DeLaquil, 2019 & Sohns, 2013).-> better to focus on AP region not global  | Agreed- changed  |
| Rahul Goswami                  | Ch.2          | 53                | 2034              | 53            | 2085          | 2 million tons of biomass burned a day seems to be a figure that needs a careful examination  | Agree  |
| Binaya Raj Shivakoti           | Ch.2          | 53                | 2036              | 53            | 2036          | For the recent data (2014) refer to ADB Key Indicators for Asia and the Pacific Table 7.3 for India per capita 1103.  | Agree  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 53                | 2056              | 53            | 2058          | So can the use of the IPBES conceptual framework improve this situation. Are there options for making the value and use of ES more explicit?  | Agree  |
| Pham Ngoc Bao                  | Ch.2          | 54                | 2062              | 54            | 2062          | "Figure 2. 11 Access to <b>safe water</b> and Sanitation in Asia Pacific region" does not match with the figure content. It should be "Figure 2.11 Access to improved sanitation facilities in Asia Pacific region". It is better to separate 2 figures, one for safe water and one for improved sanitation.  | corrected  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 54                | 2066              | 54            | 2096          | So are there any recommendation or options for managing the issue of energy security?   | yes accepted   |
| K.N.Ninan                      | Ch.2          | 54                | 2066              | 55            | 2104          | Section 2.4.3: The section could benefit if light is shed on the share of renewable resources in the total electricity consumed in the AP region by sub-regions.It is also mentioned (lines 2079-2080) that poverty is associated with low energy use, high biomass fuel use, etc. Is this desirable or undesirable ? For instance, is the use of non-renewables by the richer classes desirable ? The discussion in this section should keep the focus of this chapter in view which is nature's contribution to good quality of life. A summary table for selected countries and sub-regions in the AP region giving the per capita income, HDI, poverty levels vis-a-vis energy use by categories such as share of renewables to total electricity consumed, etc would be useful and may be added. This will add to the rigour and quality of this section | accepted   |
| Shamik Chakraborty             | Ch.2          | 54                | 2066              | 55            | 2104          | Biodiversity rich countries are energy poor and vice versa (seen in the map also). The talking points include micro level data mainly, but not seeing energy from this regional perspective, and putting how to mitigate this problem   | Accepted:  |
| Pham Ngoc Bao                  | Ch.2          | 55                | 2098              | 55            | 2098          | Figure number is incorrect.   | Accepted: corrected  |
| K.N.Ninan                      | Ch.2          | 55                | 2103              | 55            | 2104          | Within countries there is wide disparities in the accessibility to electricity across states and socio-economic groups. National and regional average could be deceptive and mask such wide variations within countries and by socio-economic groups such as for example in South Asian countries.  | Accepted, but it may be difficult to incorporate countrywise disparity in regional assessment. |
| Joanne Perry NZ<br>Focal point | Ch.2          | 56                | 2136              | 56            | 2143          | in relation to the demand on marine resources, are there any estimate of value, how big is the trade in AP, therefore what are the impacts on ES. A good case study that is often referred to is the loss of some es from the conversion of mangroves to shrimp farming.  | Noted: no space for extra case studies   |
| K.N.Ninan                      | Ch.2          | 56                | 2145              | 56            | 2146          | Figure 2. 13: This figure is not cited in the text.   | Accepted: corrected  |
| Richard Corlett                | Ch.2          | 56                | 2152              | 56            | 2152          | It is NOT true that most people in rural areas of the APR lack a livelihood.  | Accepted:edited  |
| Rahul Goswami                  | Ch.2          | 56                | 2153              | 56            | 2153          | The term "modified ecosystem" needs some discussion (it appears elsewhere too) because an agro-ecological practice which does not bring synthetic fertilisers and pesticides in, does not use fossil fuel-dependent machinery and is for subsistence is quite different from industrial monocrop farming. The question is what degree of modification is acceptable.  | Accepted: changed to managed   |

| Reviewer Name                  | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|--------------------------------|---------------|-------------------|-------------------|---------------|---------------|--|--|
| Prof. Pramod W. Ramteke        | Ch.2          | 56                | 2157              | 56            | 2157          | remove K.  | Accepted   |
| Joanne Perry NZ<br>Focal point | Ch.2          | 57                | 2168              | 57            | 2168          | what is the value of the calme export trade  | We could not address this - no information available.  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 57                | 2177              | 57            | 2177          | When you refer to "In another community...." are you referring to another Karen community or a different ethnic group?   | Accepted, this has been corrected  |
| Margarita N. Lavides           | Ch.2          | 57                | 2188              | 57            | 2201          | China's traditional system of health care and medicine should be briefly mentioned here especially that its use and impact go beyond APR.  | Accepted   |
| Joanne Perry NZ<br>Focal point | Ch.2          | 57                | 2190              | 57            | 2201          | are there any figures for the value of these medicinal services compared to traditional medicine costs.  | Accepted- added an assessment on this issue in subsection 2.3.1  |
| Richard Corlett                | Ch.2          | 57                | 2203              | 57            | 2208          | This is too brief and unclear for such an important issue.   | Accepted- changed with edit  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 57                | 2203              | 58            | 2209          | this section includes no examples and it is not clear what is intended by this very short paragraph. Is there something missing?   | Accepted- added clarity  |
| K.N.Ninan                      | Ch.2          | 57                | 2203              | 58            | 2209          | Section 2.4.5.3: Section on enviromental security is too brief for a section. Just 2-3 sentences.  | yes accepted   |
| Margarita N. Lavides           | Ch.2          | 57                | 2203              | 58            | 2209          | There should be at least a concrete example for this section.  | yes accepted   |
| Rahul Goswami                  | Ch.2          | 58                | 2211              | 58            | 2221          | Appreciate this section  | Thank you.   |
| Richard Corlett                | Ch.2          | 58                | 2215              | 58            | 2216          | 1993 is not 'recently'! How old are your authors?  | Accepted and deleted 'recently'  |
| Tian Yu                        | Ch.2          | 58                | 2220              | 58            | 2220          | The content of this box were not quite related the context, we suggest delete the box.   | Accepted:  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 58                | 2220              | 58            | 2221          | the relevance of the text is the box is not clear - what is the context for this   | Accepted:  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 58                | 2223              | 58            | 2226          | this section is not very clear, it needs editing to tidy   | Accepted: : edited   |
| Faith                          | Ch.2          | 58                | 2224              | 58            | 2225          | re "Biodiversity has cultural values, because many people ascribe intrinsic value to biodiversity, and because it represents unexplored options for the future (option values)." this miss-quotes the MA -The Millennium Ecosystem Assessment (MA 2005) synth ( <a href="http://www.unep.org/maweb/documents/document.354.aspx.pdf">http://www.unep.org/maweb/documents/document.354.aspx.pdf</a> ) clearly links biodiversity to option values: "Biodiversity loss is important in its own right because biodiversity has cultural values, because many people ascribe intrinsic value to biodiversity, and because it represents unexplored options for the future (option values)". use the original qote as it nicely highlights biodiveristy in its own right providing an NCP (18) | Accepted, added  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 58                | 2236              | 58            | 2236          | the term "national foundation legend" is unclear. If this is a recognised term then clarify in a footnote what it means.   | accepted- added a footnote to explain about the legend.  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 58                | 2239              | 58            | 2240          | it is not clear what is being referred to by the statement...."but increasing cases becoming ill-managed or abandoned. This needs clarifying   | accepted- the sentence was revised to make the meaning clear.  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 58                | 2247              | 58            | 2247          | what is meant by ..."The cooperative structure is maintaining". Maintaining what?  | accepted- the sentence was revised to make the meaning clear.  |
| K.N.Ninan                      | Ch.2          | 59                | 2250              | 60            | 2328          | Section 2.4.8: Is it possible to give a case study in a box on how vulnerability to natural disasters/extreme weather events can or has impacted on the flow and value of ecosystem services for any country or site in the AP region ?  | Accepted- another subsetion address the impact of extreme weather due to climate change in AP regions. See subsection 2.4. |
| Binaya Raj Shivakoti           | Ch.2          | 59                | 2258              | 59            | 2272          | Why autorrns are using IPBES for defining the concept of vulnerablity and adaptation already accomplished by IPCC; suggested deletion  | Accepted   |

| Reviewer Name                  | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|--------------------------------|---------------|-------------------|-------------------|---------------|---------------|--|--|
| Rahul Goswami                  | Ch.2          | 59                | 2284              | 59            | 2288          | The poverty matter probably deserves greater discussion. We already have a number of discussions concerning different kinds of poverty that are not monetary. The text already contains a jumping off point for this as it says "where income and consumption are basic parameters" - where they are not is where other kinds of poverty (limited access to biomass because of political or ethnic reasons for example, likewise with water) can be mentioned.   | Accepted, added  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 60                | 2299              | 60            | 2318          | This sections is a good use of simple options and the approach should be replicated elsewhere.   | noted  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 60                | 2327              | 60            | 2328          | it would be useful to include an example from the pacific here also as Small island developing states provide a different set of opportunities and challenges.   | Accepted, included   |
| Margarita N. Lavides           | Ch.2          | 60                | 2327              | 60            | 2328          | A box on government's efforts for climate change mitigation and adaptation is shown in Box 2.2. A box on indigenous people's role on climate change mitigation can also be shown. The content of this Box can be based on the paper by the Rights and Resources Initiative, Woods Hole Research Centre and World Resources Institute most comprehensive effort yet to quantify the contribution of traditional forest guardians to reduce emissions of greenhouse gases. Authors say the expansion of tribal land rights is the most cost-effective way to protect forests and sequester carbon. Based on satellite surveys of 37 tropical countries, the study estimates community-claimed lands sequester at least 54,546m tonnes of carbon – roughly four times the world's annual emissions. As well as reducing 20-30% of carbon dioxide emissions, the forests provide benefits of clean water, pollination, biodiversity, flood control and tourist attractions that are said to be worth \$523bn to \$1.165tn in Brazil, \$54-119 bn in Bolivia, and \$123-277bn in Colombia over the next 20 years. | Accepted included  |
| Rahul Goswami                  | Ch.2          | 60                | 2327              | 60            | 2328          | box 2.2 on climate change mitigation and adaptation in India. This is an example of how a form of "environmental correctness" is contradicted by policy measures to the opposite in the very same sector, agriculture. While India's National Initiative on Climate Resilient Agriculture is under-funded and under-staffed, its aims are overturned by policy decisions to reopen inorganic fertiliser plants in the country, increase the use of mechanisation by farmers (whereas more than 85% are smallholders), and concentrate large new infrastructure called "modern terminal markets" each of which are large net contributors to emissions and resources use.   | Accepted: included   |
| Henry Scheyvens                | Ch.2          | 62                | 2380              | 62            | 2383          | It is important to recognise that views towards nature can differ widely within stakeholder groups, e.g. within a local community some people may want to maintain traditional landscape management practices and others may want to change to intensive monocrop agricultural systems that offer higher financial returns.  | Agreed, and a sentence added to address the reviewer's concern.              |
| Henry Scheyvens                | Ch.2          | 62                | 2398              | 62            | 2401          | A useful supporting reference is:<br>Scheyvens, H., Hyakumura, K., & Seki, Y. (2007). Decentralization and state-sponsored community forestry in Asia: Seven country studies of transitions in forest governance, contemporary forest management and the prospects for communities to contribute to and benefit from sustainable forest management. Hayama: IGES.  | Agreed- The suggested literature reviewed and a sentence based on this added |
| Joanne Perry NZ<br>Focal point | Ch.2          | 65                | 2484              | 65            | 2486          | Another case study that could be explored in relation to this is the NZ example of the Hauraki Gulf Marine Park Management Forum see <a href="http://www.aucklandcouncil.govt.nz/en/aboutcouncil/representativesbodies/haurakigulf/forum/pages/home.aspx">http://www.aucklandcouncil.govt.nz/en/aboutcouncil/representativesbodies/haurakigulf/forum/pages/home.aspx</a> for more detail   | Agreed- Information on the Harauki GMPM Forum added                          |

| Reviewer Name               | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|-----------------------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| Richard Corlett             | Ch.2          | 65                | 2487              | 65            | 2487          | What are 'co-managed institutions'? 'co-' with whom?  | Agreed- Clarified  |
| Prof. Pramod W. Ramteke     | Ch.2          | 67                | 2558              | 67            | 2558          | add , after Shivakoti and before 2005   | Agreed- added  |
| Prof. Pramod W. Ramteke     | Ch.2          | 67                | 2563              | 67            | 2563          | remove J. E.  | Agreed- removed  |
| Margarita N. Lavides        | Ch.2          | 67                | 2572              | 68            | 2579          | The following References can be useful for discussion of landscape level biodiversity conservation/resource management: 1. Reed J, Van Vianen J, Deakin EL, Barlow J and Sunderland T. 2016. Integrated landscape approaches to managing social and environmental issues in the tropics: learning from the past to guide the future. Global Change Biology 22: 2540-2554; 2. Reed, J, Van Vianen J, Barlow J and Sunderland T. 2017. Have integrated landscape approaches reconciled societal and environmental issues in the tropics? Land Use Policy 63: 481-492. | Agreed- New information on landscape approach added based on the suggested literature.   |
| Prof. Pramod W. Ramteke     | Ch.2          | 68                | 2603              | 68            | 2603          | Maslow year is missing  | Accepted - made change to line 2603.   |
| Joanne Perry NZ Focal point | Ch.2          | 70                | 2707              | 71            | 2755          | Not all countries in the AP have high poverty levels, in fact a large number do not. This needs to be statement more clearly and it might be better to say that some specific regions of the AP do.   | Accepted - made change to line 2651-2657 that "The Asia and Pacific region are home to more than 60 per cent of the global population and produce almost 40 per cent of the world's gross domestic product (GDP) from its 56 countries. People in the region generally have a better quality of life, despite persistent poverty. While there are three industrialized countries, twelve countries have least developed status (UN, ADB and UNDP, 2017)." United Nations, Asian Development Bank, United Nations Development Programme, Eradicating Poverty and Promoting Prosperity in a Changing Asia-Pacific (United Nations, Bangkok, 2017) page 2 |
| Prof. Pramod W. Ramteke     | Ch.2          | 71                | 2762              | 71            | 2762          | remove p. 159   | Accepted, Removed  |
| Prof. Pramod W. Ramteke     | Ch.2          | 72                | 2775              | 72            | 2775          | add , afterDavies and before 2015   | Accepted,Added   |
| Prof. Pramod W. Ramteke     | Ch.2          | 72                | 2812              | 72            | 2812          | remove p. 416   | Accepted,Removed   |
| Prof. Pramod W. Ramteke     | Ch.2          | 73                | 2823              | 73            | 2823          | remove K.   | Accepted,Removed   |

| Reviewer Name         | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|-----------------------|---------------|-------------------|-------------------|---------------|---------------|---|---|
| IPBES NFP - Australia | Ch.2          | 73                | 2828              | 73            | 2884          | Can we please use the terminology of Indigenous Australians rather than Aboriginal Australians. A further example are the customary laws of <del>Aboriginal</del> <b>Indigenous</b> Australian's, who historically have relied heavily on plants, animals and the seasonal environment for their survival, and have a well-developed knowledge of the natural world (Great Barrier Reef Marine Park Authority, 2016) as illustrated in the following case study. Through these traditional practices, <del>Aboriginal-</del> <b>Indigenous</b> Australians are managing the ecosystem and using it in a sustainable format. | Accepted, Corrected as recommended                            |
| Margarita N. Lavides  | Ch.2          | 73                | 2830              | 74            | 2884          | In the light of the widespread coral bleaching in Great Barrier Reef in 2016 and 2017, it would be useful to include briefly in Box what the Aboriginal Australians (or along with the Australian government) did to mitigate or to adapt to the situation. It would be very useful particularly for policy makers especially for those countries which are reef-rich and and with huge reef-dependent constituents.  | Noted: due to space and time limitations this is not possible |
| K.N.Ninan             | Ch.2          | 74                | 2908              | 76            | 2962          | Some of the boxes given in this section e.g. Fiji case study are too detailed and need to be shortened and discussion sharpened for the benefit of readers  | Accepted: edited  |
| India NFP             | Ch.2          | 76                | 2985              | 76            | 2986          | The statement is based on a report which is not peer reviewed. The observations are not based on facts and the inferences are incorrect. Hence, the observation pertaining to India may be deleted.   | accepted - changed with edit                                  |
| Binaya Raj Shivakoti  | Ch.2          | 77                | 3013              | 77            | 3027          | Listing relevant SDGs does not add much value to IPBES, suggested to delete   | accepted - changed with edit                                  |
| Henry Scheyvens       | Ch.2          | 78                | 3054              | 78            | 3062          | You will find the following reference provides detailed studies in separate chapters on India's Forest Rights Act (Chapter 2) and the Philippines IPRA (Chapter 5):<br>Scheyvens, H. e. (2011). Critical review of selected forest regulatory initiatives: Applying a rights perspective. Hayama: IGES.<br><a href="https://pub.iges.or.jp/pub/critical-review-selected-forest-regulatory">https://pub.iges.or.jp/pub/critical-review-selected-forest-regulatory</a>  | Accepted: Reference Included                                  |
| Margarita N. Lavides  | Ch.2          | 78                | 3055              | 78            | 3057          | The Philippine 1997 Indigenous Peoples Rights Act can be downloaded from the following link for purposes of direct quotes or for brief summary:<br><a href="http://www.wipo.int/edocs/lexdocs/laws/en/ph/ph083en.pdf">http://www.wipo.int/edocs/lexdocs/laws/en/ph/ph083en.pdf</a>  | Accepted: Relevant Act quoted                                 |
| Thomas Brooks         | Ch.2          | 78                | 3055              | 78            | 3057          | A useful citation here might be Borrini-Feyerabend (2014) pages 85-87 in<br><a href="https://portals.iucn.org/library/node/44911">https://portals.iucn.org/library/node/44911</a> .   | Accepted: Citation incorporated                               |

| Reviewer Name        | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|----------------------|---------------|-------------------|-------------------|---------------|---------------|---|---|
| K.N.Ninan            | Ch.2          | 78                | 3058              | 78            | 3062          | Reference is made to India's Recognition of Forest Rights Act 2006. However its enforcement has been difficult especially in tiger reserves.  | Accepted: Modified the text to "The rights vested to them include rights to: hold and live in the forest; use, conserve and protect it, get rehabilitated in the case of illegal eviction or forced displacement; receive basic amenities subject to the restrictions imposed to the forests (Perera, 2009)."<br>"The rights vested to them include rights to: hold and live in the forest; use, conserve and protect it, get rehabilitated in the case of illegal eviction or forced displacement; receive basic amenities subject to the restrictions imposed to the forests (Perera, 2009)."<br>"The rights vested to them include rights to: hold and live in the forest; use, conserve and protect it, get rehabilitated in the case of illegal eviction or forced displacement; receive basic amenities subject to the restrictions imposed to the forests (Perera, 2009)."<br>"The rights vested to them include rights to: hold and live in the forest; use, conserve and protect it, get rehabilitated in the case of illegal eviction or forced displacement; receive basic amenities subject to the restrictions imposed to the forests (Perera, 2009)."<br>accepted text changed to |
| Margarita N. Lavidis | Ch.2          | 79                | 3065              | 79            | 3080          | A good example of marine indigenous tenure is that for Tagbanua in Coron, Palawan. The authors may use the following references for this:<br>1.Capistrano, R.C.G. and Charles A.T. 2012. Indigenous rights and coastal fisheries: A framework of livelihoods, rights and equity. Ocean and Coastal Management 69: 200-209.<br>2.Capistrano, R.C.G., 2010. Reclaiming the ancestral waters of indigenous peoples in the Philippines: the Tagbanua experience with fishing rights and indigenous rights. Marine Policy 34 (1), 453e460.<br>3.Sampang AG. The Calamian Tagbanwa ancestral domain (Coron Island, Palawan, Philippines): evaluation of traditional fishing practices towards biodiversity conservation and sustainability. Los Banos, Laguna: World Fish Center; 2007. | Accepted: suggested references incorporated   |

| Reviewer Name                  | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|--------------------------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| Prakash Nelliya                | Ch.2          | 79                | 3082              | 80            | 3166          | For achieving the “Inter and intra-generational equity and fairness” initiatives of the Young Ecosystem Services Specialists (YESS) network is interesting. However the ‘trade-offs’ between ecosystems and developments and concerns of mainstreaming biodiversity in developmental activities are crucial and to be discussed in this part. | Accepted, section reworked   |
| Prof. Pramod W. Ramteke        | Ch.2          | 79                | 3087              | 79            | 3087          | remove p.10   | Accepted: removed  |
| Prof. Pramod W. Ramteke        | Ch.2          | 79                | 3091              | 79            | 3091          | remove p. 43  | Accepted: Removed  |
| Prof. Pramod W. Ramteke        | Ch.2          | 79                | 3107              | 79            | 3107          | Remove K. J.  | Accepted: Removed  |
| Prof. Pramod W. Ramteke        | Ch.2          | 79                | 3110              | 79            | 3110          | remove p. 159   | Accepted: Removed  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 79                | 3802              | 79            | 3802          | this section needs to make more explicit the relevance of BES.  | Accepted: changes made in text to incorporate this suggestion  |
| Richard Corlett                | Ch.2          | 81                | 3168              | 81            | 3202          | This section needs to be brought up to date to reflect the Paris Agreement and the (I)NDC's from the countries of the APR.  | Accepted: Suggested addition made to reflect the Paris Agreement and the (I)NDC's from the countries of the APR. |
| Prof. Pramod W. Ramteke        | Ch.2          | 81                | 3171              | 81            | 3171          | remove K.   | Accepted: Removed  |
| NFP of China                   | Ch.2          | 81                | 3184              | 81            | 3184          | In recent years, China's desertification control achieves remarkable success, the description here is not consistent with the facts, we recommend deleting  | Accepted: deleted  |
| Richard Corlett                | Ch.2          | 81                | 3184              | 81            | 3185          | What is the source for desertification in China? I don't think this is true.  | Accepted: deleted  |

| Reviewer Name           | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|-------------------------|---------------|-------------------|-------------------|---------------|---------------|--|--|
| Prakash Nelliya         | Ch.2          | 81                | 3204              | 84            | 3333          | <p>Under the title “Equity in access to and utilization of Nature’s Contributions”, the APR’s partnership in CBD and initiatives in the implementation of Nagoya Protocol are explained nicely. Under the head of India: the existing text may revise based on the information given below.</p> <p><b>India</b> (Existing text): <i>The Biological Diversity Act (2002) of India operates at National, State and Provincial Levels and so operates through a coordinated approach. India adopted, under this Act, a recent notification “Guidelines on Access to Biological Resources and Associated Knowledge and Benefit-Sharing Regulations, 2014”. India has begun issuing permits and the constitution of internationally recognized certificates of compliance, including entering into benefit-sharing agreements, with indigenous and local communities benefitting from the sharing of benefits. The Act recognises the role and participation of indigenous and local communities in conserving biological resources and associated Indigenous Traditional Knowledge (Arjjumend &amp; Alam, 2016).</i></p> <p><b>Additional Information</b><br/> India took initiatives on legislative and administrative measures on the implementation of the ABS or the Nagoya Protocol. Since India is a federal nation initiatives are taken at two levels. At the National Level: (a) Biological Diversity Act (2002), (b) Biological Diversity Rules (2004), and (c) Guidelines on Access to Biological Resources and Associated Knowledge and Benefit Sharing Regulation (2014) were implemented. In the state/provincial levels, each state notified ‘State Specific Biological Diversity Rules’ for the smooth implementation of the ABS in their respective jurisdiction. Government of India come up with a three tier institutional / administrative structure for operationalizing the ABS. Accordingly, the National Biodiversity Authority (NBA) at the national/central level, the State Biodiversity Boards (SBBs) at the state / provincial levels, and the Biodiversity Management Committees (BMCs) at the village/hamlet level oversee the implementation of the Biological Diversity Act and Rules. NBA signed around 400 ABS agreements and placed 46 permits (Internationally Recognized Certificates of Compliance in BS-CH.</p> | Accepted: shortened somewhat for brevity.  |
| Richard Corlett         | Ch.2          | 82                | 3215              | 83            | 3215          | When was the 'colonial period' in China or Thailand?   | Accepted and corrected.  |
| Prof. Pramod W. Ramteke | Ch.2          | 82                | 3219              | 82            | 3219          | remove Robert  | Accepted and removed.  |
| K.N.Ninan               | Ch.2          | 82                | 3221              | 82            | 3224          | Reference is made to Joint Forest Management in India. Experience with JFM in India has been mixed with success stories in some places and failures or no change in others. Also some typo error. Is it proving profits or providing profits ?   | Accepted - typo corrected, text updated. NOTE: one ref removed (very old) and two new ones added.  |
| Government of Japan     | Ch.2          | 82                | 3237              | 82            | 3246          | Please update to the latest version.   | This could not be reflected as we could not find any more recent versions of this, and papers published in 2017 are still citing this edition. |



| Reviewer Name               | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|-----------------------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| IPBES NFP - Australia       | Ch.2          | 82                | 3237              | 82            | 3246          | Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) is an international agreement which was adopted by the Conference of the Parties to the Convention on Biological Diversity (CBD) at its tenth meeting in 2010 and entered into force on 12 October 2014. 72 Parties have ratified the Nagoya Protocol as of February 2016. 21 Parties from the APR have ratified the Nagoya Protocol, with 10 having the ratification process underway and a further 7 intending to ratify the Protocol <b>SHOULD BE UPDATED BY AUTHORS</b> . Regionally the Association of South east Asian Nations (ASEAN) has developed a Draft Framework Agreement on ABS. Countries within the APR with legislation in place are India, Bhutan, Philippines, Malaysia and Afghanistan, <b>and Australia</b> while China, Indonesia, Thailand, Bangladesh and Nepal have developed other initiatives (Edition, Medaglia, Perron-welch, Phillips, & Law, 2014). | Accepted - updated and changed footnote ref to a "live" page   |
| U.S. government             | Ch.2          | 82                | 3248              | 82            | 3257          | The Nagoya articles referenced are incorrect; recommend checking the reference. Overall, the paragraph is very unclear; recommend that it be re-drafted.  | Accepted: We have removed some material and moved some up, so that the content of the protocol is described before the status of its implementation. |
| Joanne Perry NZ Focal point | Ch.2          | 83                | 3270              | 83            | 3311          | it is not clear what the relevance of these example are to the AP assessment. A clear statement linking these to the AP assessment objectives is needed.  | Noted as part of the review  |
| Tatsuya Horikiri            | Ch.2          | 84                | 3312              | 84            | 3315          | On 18 May 2017, just before the deposition of its acceptance of Nagoya protocol on 22 May 2017, the Japanese government published official ABS guidelines, to be effective from Augst 20, 2017 (the date when the Japan becomes a party to the protocol).   | Accepted - edited  |
| Government of Japan         | Ch.2          | 84                | 3315              | 84            | 3315          | Please add the following sentence at the end "Japan concluded the Nagoya Protocol on 22 May, 2017. Japan's measures on ABS were issued on 18 May, 2017, and will come in effect on 20 August, 2017."  | Accepted - done  |
| IPBES NFP - Australia       | Ch.2          | 84                | 3323              | 84            | 3329          | The Environmental Protection and Biodiversity Conservation ( <b>EPBC</b> ) Act ( <del>EPBCA</del> ) <del>1999</del> – <b>Regulations 2000</b> establishes the framework for future specific <b>contains</b> regulations on access <b>and benefits sharing of</b> to genetic resources <b>in Commonwealth areas</b> . Australia's Federal system establishes ownership rights to native biological resources depending on where they are found i.e. Commonwealth, State or Territory government lands or waters, Indigenous lands, freehold or leasehold lands. Applicants for a permit to access biological resources <b>in Commonwealth areas, (and some other sub-national jurisdictions) are required to</b> <del>must</del> enter into a benefit-sharing agreement (BSA) with the access provider for the resource.   | Accepted - changed accordingly   |
| Joanne Perry NZ Focal point | Ch.2          | 84                | 3331              | 84            | 3333          | Where did this statement come from in relation to NZ. At present we do not have a ABS regime in place as per the CBD requirements, we do however manage access to genetic resources in through specific regulatory regimes with the exception of native plants obtained from private land. The permitting process ensure that local indigenous communities are engaged in the permitting process. I suggest you seek clarification via NZ Ministry of Foreign Affairs and Trade who lead NZ engagement in the CBD.  | Accepted, statement deleted  |
| Prof. Pramod W. Ramteke     | Ch.2          | 84                | 3341              | 84            | 3341          | remove ) after GEF  | Accepted: Removed  |
| Prof. Pramod W. Ramteke     | Ch.2          | 84                | 3349              | 84            | 3349          | remove B. and add &   | Accepted: Removed  |

| Reviewer Name           | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response   |
|-------------------------|---------------|-------------------|-------------------|---------------|---------------|---|--|
| Margarita N. Lavides    | Ch.2          | 84                | 3356              | 85            | 3364          | Examples of technologies for conservation and sustainable use of biodiversity should further be elaborated and given examples. For examples technologies developed by USAID e.g. Land Technology Solutions etc. or those developed or used by National Geographic e.g. expedition remote cameras and other equipment; or those developed and used by NOAA. It is important that policy makers be made aware of the existence and use and importance of these technologies, both soft and hard, to give them a good grounding in policy making that maximizes available technologies. Further, it is important to include technologies used in Law Enforcement, for example, see link of article showing how illegal loggers are caught using DNA, Machine Vision and Chemistry: <a href="http://www.wri.org/blog/2017/04/rainforest-csi-how-were-catching-illegal-loggers-dna-machine-vision-and-chemistry">http://www.wri.org/blog/2017/04/rainforest-csi-how-were-catching-illegal-loggers-dna-machine-vision-and-chemistry</a> | Accepted and modified and new references with details of examples added. These references should be added in the foot note: <a href="http://www.wri.org/blog/2017/04/rainforest-csi-how-were-catching-illegal-loggers-dna-machine-vision-and-chemistry">http://www.wri.org/blog/2017/04/rainforest-csi-how-were-catching-illegal-loggers-dna-machine-vision-and-chemistry</a><br><a href="https://www.nationalgeographic.org/explorers-festival/2016/videos-and-stories/dropcams-probe-ocean-for-darkest-secrets/">https://www.nationalgeographic.org/explorers-festival/2016/videos-and-stories/dropcams-probe-ocean-for-darkest-secrets/</a><br><a href="http://oceanexplorer.noaa.gov/technology/subs/subs.html">http://oceanexplorer.noaa.gov/technology/subs/subs.html</a><br><a href="https://www.land-links.org/document/fact-sheet-land-technology-solutions/">https://www.land-links.org/document/fact-sheet-land-technology-solutions/</a> |
| Harald Pauli            | Ch.2          | 84                | 3363              | 84            | 3364          | besides 'remote sensing' suitable methods for 'ground truthing resp. monitoring biodiversity in the field' will be decisive of updated biodiversity information - which however is more about building expertise rather than technology transfer, but I think should be mentioned in this context   | Accepted and mentioned as per suggested in the text  |
| Prof. Pramod W. Ramteke | Ch.2          | 86                | 3418              | 86            | 3418          | remove R. and Rosemerry   | Accepted: Removed  |
| IPBES NFP - Australia   | Ch.2          | 87                | 3437              | 87            | 3446          | In Australia, Indigenous Protected Areas are a significant part of the Australian Government's National Reserve System, but have distinctive socio-cultural and political characteristics as indigenous people are the primary decision makers and drivers of knowledge integration (J. Davies et al., 2013). Innovations that are evident in this context include (continues as written).  | Accepted: reworded   |
| Prof. Pramod W. Ramteke | Ch.2          | 87                | 3439              | 87            | 3439          | remove J.   | Accepted: Removed  |
| Prof. Pramod W. Ramteke | Ch.2          | 87                | 3444              | 87            | 3444          | remove J.   | Accepted: Removed  |

| Reviewer Name           | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response                 |
|-------------------------|---------------|-------------------|-------------------|---------------|---------------|---|--------------------------|
| IPBES NFP - Australia   | Ch.2          | 87                | 3448              | 87            | 3521          | <p>Indigenous Australian land management is an integral part of the lives of <b>Indigenous</b> communities <b>that helps to ensure</b> in ensuring that the land is protected for future generations. Land <b>an sea</b> management plays an important role in ensuring the biodiversity of ecosystems is sustained for future use, and it draws on ancient knowledge systems that continue to be actively transferred from generation to generation. <del>Aboriginal</del> <b>Indigenous Australian</b> communities, <del>especially in Northern Australia communities</del> are so closely connected to the land that it is essential for them, and their culture, that they work <del>tirelessly</del> to protect and maintain their natural ecosystems.</p> <p>Across Australia, land management practices are highly diverse and take form through a range of practices including, natural resource management, fire management, endangered species initiatives, and water planning processes (Hill, R., Pert, P., Davies, J., Robinson, C. J., Walsh, F., &amp; Falco-Mammone, 2013). These practices allow for Indigenous Australians to continue to <del>preserve and protect</del> <b>sustainably manage</b> their land <b>for generations to come.</b>, and to ensure that the <del>future of the land remains.</del></p> <p>Fire management and restoration of land is a process that is used frequently by Indigenous Australian in aiming to preserve the biodiversity of ecosystems on the land. In the Northern Territory, Indigenous Australians use fire management as an economically and ecologically sustainable approach to long-term fire management in areas that are remote, rugged, vast and biologically diverse with high risk of fire damage (Yibarbuk et al., 2002). It is in these areas that Indigenous Australians implement traditional practices and procedures to <b>manage and</b> protect their land.</p> <p>Fire management is a procedure that is carefully planned and undertaken to ensure that it is executed correctly, without having negative impacts on the environment or the community. Through burning, <del>Aboriginal</del> <b>Indigenous Australian</b> communities are able to “encourage the re-sprouting of perennial grass, angolde, or “green pick”, and to attract male and female wallabies” (Russell-Smith et al., 1997) to assist with the progression of vegetation in the area. However, without appropriate and sufficient human intervention, frequent high intensity burning can lead to widespread fires causing damage to vegetation with decreased change of recovery (M. G. Turner, Romme, Gardner, O’Neill, &amp; Kratz, 1993; Yibarbuk et al., 2002). Through frequent, strategically planned low intensity burns; the risk of permanent damage to the ecosystems and</p> | Accepted; edited         |
| K.N.Ninan               | Ch.2          | 87                | 3448              | 89            | 3521          | This section on 'Indigenous Australian Land Management' is quite detailed and needs to be shortened   | Accepted: : edited       |
| Prof. Pramod W. Ramteke | Ch.2          | 87                | 3459              | 87            | 3459          | remove R., P., J., C. J., F.  | Accepted: Removed        |
| Prof. Pramod W. Ramteke | Ch.2          | 87                | 3476              | 87            | 3476          | remove M. G.  | Accepted: Removed        |
| Prof. Pramod W. Ramteke | Ch.2          | 88                | 3496              | 88            | 3496          | add year O'Donnel   | Accepted, author deleted |
| Prof. Pramod W. Ramteke | Ch.2          | 90                | 3606              | 90            | 3606          | remove A.   | Accepted: Removed        |
| Richard Corlett         | Ch.2          | 90                | 3613              | 91            | 3615          | You can't pick and choose between IPCC versions. AR5 replaces AR4, which is cited twice here.   | Accepted: edited         |

| Reviewer Name           | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response  |
|-------------------------|---------------|-------------------|-------------------|---------------|---------------|--|---|
| Prof. Pramod W. Ramteke | Ch.2          | 91                | 3634              | 91            | 3634          | remove , after Oppenheimer   | Accepted: Removed   |
| India NFP               | Ch.2          | 92                | 3659              | 92            | 3659          | Box 2. 11: This box is repeated. See Box 2.2 in Page 60 for the same box.  | Accepted: deleted   |
| K.N.Ninan               | Ch.2          | 92                | 3659              | 92            | 3659          | Box 2. 11: This box is repeated. See Box 2.2 in Page 60 for the same box !!!   | Accepted: deleted   |
| Nirmal S. K. Harsh      | Ch.2          | 92                | 3661              | 92            | 3678          | So far biodiversity conservation efforts are failing because compensation for conservation to the local people are not coming, besides the IPR benefits are also not given to them, resulting into failure of policies being made by the governments for this purpose. (may be added)  | Accepted: added   |
| Margarita N. Lavides    | Ch.2          | 92                | 3661              | 93            | 3700          | It is very important that policy makers are made aware of conservation conflicts- for example between sociologies and conservation biologists and especially between environmental protection and economic use e.g. extractive industry like mining. Or conflicts within similar industry-- small scale fisheries versus the industrial fisheries which both would benefit from conservation and sustainable use of fisheries. There fore, it would be good for in this section to have two case studies emphasizing on how the conservation conflicts were resolved. This is very important especially for low income and middle income countries. It is striking read that there is no mention of mining as a very important human activity that destroys ecosystems and biodiversity and eventually can leave the communities displaced and poorer. In this Chapter, I suggest some discussion of mining and biodiversity and human well-being in relevant sections. There are many examples of these from the Philippines e.g. Marcopper case. | Accepted<br>To reach it, AP countries are trying to manage conflicts towards an adaptive co-management. They plan for a “BES and human development causality chain”, a chain of inputs and events. If various stakeholders involve, very strong economic and human development outcomes are lead (Lindon et al. 2014; Bavinck et al. 2014). It is why Böcher and Krott (2016) have developed the RIU (research, integration and utilization) model to professionalize the scientific support for policy by producing knowledge in science and policy and by building bridges successfully between researchers and political actors.<br><br>Lindon, J. G., Canare, T. A., & Mendoza, R. U. (2014). Corporate and public governance in mining: lessons from the Marcopper mine disaster in Marinduque, Philippines. Asian Journal of Business Ethics, 3(2), 171-193.<br><br>Bavinck, M., Pellegrini, L., & Mostert, E. (Eds.). (2014). Conflicts over natural resources in the Global South: conceptual approaches. CRC Press.<br><br>Böcher, M., & Krott, M. (2016). Science makes the world go round: Successful scientific knowledge transfer for the environment. Springer. |

| Reviewer Name                  | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment  | Response   |
|--------------------------------|---------------|-------------------|-------------------|---------------|---------------|--|--|
| Joanne Perry NZ<br>Focal point | Ch.2          | 92                | 3683              | 92            | 3683          | Can you provide some examples of conflict trees and maps. These terms may not be well known. A footnote would suffice.   | Accepted- added<br>(see more at Joja et al. 2016)<br><br>Joja, C., Mihai, N., & Hossu, C. A. (2016). Environmental Conflicts. Interdisciplinary Perspectives on Contemporary Conflict Resolution, 56-79. |
| Prof. Pramod W. Ramteke        | Ch.2          | 93                | 3697              | 93            | 3697          | remove Grazia  | Accepted, this has been addressed  |
| K.N.Ninan                      | Ch.2          | 93                | 3697              | 93            | 3700          | The sentence: However any strong link between biological...will result in further conservation of biodiversity and improvement of human wellbeing is vague i.e. Meaning not clear.   | Accepted, this has been addressed  |
| K.N.Ninan                      | Ch.2          | 93                | 3735              | 93            | 3736          | Correct section title to: Key Findings: Nature's Contributions to People and Quality of Life   | Accepted: Corrected  |
| Joanne Perry NZ<br>Focal point | Ch.2          | 93                | 3738              | 93            | 3738          | the statement that the AP spans from Mongolia in the north and NZ in the south needs to be consistently used. Elsewhere I seem to recall that Australia was identified as the south boundary which is incorrect. Please check for consistency including in other chapters.   | Thank you and noted.   |
| Binaya Raj Shivakoti           | Ch.2          | 94                | 3763              | 94            | 3770          | Found similar content in Chapter 1, hope this is not intentional repetition  | Accepted: Removed this text after checking with Chapter 1  |
| Nirmal S. K. Harsh             | Ch.2          | 94                | 3786              | 95            | 3794          | Looking to the enormity of the dependence of people on plants and animals in APR the pressure and threat to biodiversity is inevitable. (may be added)   | Accepted: incorporated appropriately under emerging issues   |
| Shamik Chakraborty             | Ch.2          | 94                | 3791              | 94            | 3791          | Satoumi related. ILK based systems that give bundles of ecosystem service benefits in the human dominated landscapes and seascapes See also: <a href="https://www.cbd.int/doc/publications/cbd-ts-61-en.pdf">https://www.cbd.int/doc/publications/cbd-ts-61-en.pdf</a>   | Accepted: Incorporated in a more appropriate place along with Satoyama in the earlier section  |
| Shamik Chakraborty             | Ch.2          | 96                | 3853              | 96            | 3853          | Lack of political resilience provides opportunities to integrate ILK based systems or their characteristics in the formal policy making. To learn from, replicate and incorporate sustainable practices in decision making. For more, see: <a href="https://collections.unu.edu/eserv/UNU:6026/UNUIAS_PB_8.pdf">https://collections.unu.edu/eserv/UNU:6026/UNUIAS_PB_8.pdf</a> Also see Steinberg PF. 2013. Institutional resilience amid political change: The case of biodiversity conservation. <a href="http://scholarship.claremont.edu/cgi/viewcontent.cgi?article=1784&amp;context=hmc_fac_pub">http://scholarship.claremont.edu/cgi/viewcontent.cgi?article=1784&amp;context=hmc_fac_pub</a> | This comment is hard to relate to the section where it is suggested  |
| MDFortes                       | Ch.2          | 96                | 3867              | 96            | 3867          | There are trade-offs and compromises vis-à-vis resources protection and conservation when people use resources (their goods and services). I think these have to be included somewhere in the chapter (under Challenges and Implications?)   | Accepted: Incorporated   |
| Richard Corlett                | Ch.2          | 96                | 3867              | 96            | 3867          | Where is the evidence for this 'disproportionate increase in frequency and intensity of climate-induced natural disasters'? I don't know of a rigorous study that shows this. Reporting has certainly increased.   | Accepted: Reference included   |
| Prakash Nelliya                | Ch.2          | 96                | 3877              | 96            | 3878          | <i>"In order to reduce poverty and vulnerability, many countries in the region will need more rapid and far more inclusive economic growth and mechanisms in place".</i><br>In this regard it is important to argue the level of cooperation required among the Asia and Pacific region nations.   | Accepted: suggestion incorporated  |

| Reviewer Name           | Chapter / SPM | From Page (start) | From Line (start) | To Page (end) | To Line (end) | Comment   | Response  |
|-------------------------|---------------|-------------------|-------------------|---------------|---------------|---|---|
| Shamik Chakraborty      | Ch.2          | 96                | 3877              | 96            | 3878          | Controversial claim. Also a bit sudden. What kind of poverty is talked about here? Economic only I guess. Economic poverty can decrease at the expense of biodiversity and (related) human well being. Also the part 'challenges and implications are a bit vaguely written, what are the challenges and what are the implications? A good flow to finish this chapter is necessary | Accepted: Removed and captured in the revised text to respond to previous comment |
| Prof. Pramod W. Ramteke | Ch.2          | 96                | 3885              | 119           | 5051          | In Reference section Maslow is missing  | Accepted: Included  |