

Reviewer Name	Chapter	From Page	From Line	To Page	To Line	Comment	Response
Cameron Colebatch	General					The documents are good summaries, but what are the implications of the documents? What are the authors seeking policy makers to do with them? Suggest that (at the least) a dot point summary of the 'Recommendations and policy options' be provided at the beginning of each chapter to make this more prominent. If appropriate, it may also be worth preparing a 'summary for policy makers' (SPM) for each document as well.	Thank you for the suggestion. An Executive Summary has been added to the chapter during the revision, and a separate SPM has been made.
Li Qingfeng	General					To be more straightforward, simplified	Thank you. We have hopefully improved this in the revisions.
Li Qingfeng	General					1, The Report in overall is too academia, too detailed in scientific exploration and descriptions. In consideration of the principal aim "to facilitate the implementation of the National ... and the "Inter-governmental" nature of the organization, the Report has to be more "publicly explicit", rather than "scientifically complicated". If the Report is to be read by the policy makers, and to draw attentions from the public, the content is to be simplified and the volume greatly reduced, one third is more than enough.	Thank you. We have hopefully improved this in the revisions.
LOO MIN JET	General					References: 1) UNEP-IEMP (2016). A Summary for Policy-makers and Stakeholders: Ecosystem Services and Management Assessment in Phou Khao Khouay Biodiversity Conservation Area (BCA), Vientiane, Lao PDR 2) UNEP-IEMP (2016). A Summary for Policy-makers and Stakeholders: Ecosystem Services and Management Assessment in Pha Taem National Park, Ubon Ratchathani, Thailand 3) UNEP-IEMP (2016). A Summary for Policy-makers and Stakeholders: Ecosystem Services and Management Assessment in Phnom Kulen National Park, Siem Reap, Cambodia 4) UNEP-IEMP (2016). A Summary for Policy-makers and Stakeholders: Ecosystem Services and Management Assessment in Tram Chim National Cao Lanh, Mekong Delta, Vietnam 5) UNEP-IEMP (2016). A Summary for Policy-makers and Stakeholders: Ecosystem Services and Management Assessment in Nabanhe Watershed National Nature Reserve, Xishuangbanna Dai Autonomous Prefecture, Mekong Upstream, China 6) UNEP-IEMP (2016). A Summary for Policy-makers and Stakeholders: Ecosystem Services and Management Assessment on Myanmar	Thank you. The suggestion has been considered taking into account overall balance.
Ludwig Kammesheidt, IB	General					In some tropical countries in Asia the area designated to sustainable forestry ("forest reserves") exceeds the area under protection. Thus, the implementation of sustainable forest management systems in natural forests by applying FSC standards is essential for effective biodiversity conservation. In reference to conservation of nature it is of particular importance that these forest reserves are at least partly located in lowland areas where otherwise land has been already converted at large extent. The current assessment does not elaborate on this issue. Maybe you could include it in your further work.	Thank you. This is addressed in part in chapter 3 under protected area coverage and future trends and in chapter 6 under governance systems and policy options.
Ludwig Kammesheidt, IB & Uta von Witsch	General					Other knowledge-forms such as indigenous and local knowledge are well included throughout the assessment. Maybe you could additionally include a specific sub-section (e.g. in chapter 1) on the current status and use of indigenous and lokal knowledge in the Asia Pacific region (e.g. to what extent does it contribute to the academic knowledge base?; perhaps include some case studies, if available).	Thank you for the suggestion. It is very difficult to have this regional overview due to lack of literature (by nature of indigenous and local knowledge).
Stefan Hotes	General					The way the IPBES conceptual framework is referenced in the text should be more stringent, and the IPBES guide on Assessments as well as the other IPBES deliverables including guides should be integrated more clearly. In electronic versions of the assessment, hyperlinks to these resources could be included.	Thank you. The formatting has been corrected accordingly.
Thomas Brooks (IUCN)	General					Congratulations to the authors for all their hard work in producing this FOD.	Thank you.
Uta von Witsch	General					You might want to include more case studies of the Asia Pacific region in this chapter. This could help to focus the findings specifically on the region.	Thank you. The suggestion has been considered taking into account overall balance.
Uta von Witsch	General					Please provide a degree of confidence for the main findings throughout the assessment as laid down in the 'Guide on the production and integration of assessments from and across all scales (IPBES deliverable 2a)' (see IPBES/4/INF/9, p. 60, Figure 4.1).	This has been included in the Executive Summary as per the common practice across assessments.
Uta von Witsch	General					A list of abbreviations and a glossary should be included for the whole assessment.	This has been done.

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Uta von Witsch & Ludwig Kammesheid, IB	General					We highly appreciate the case studies provided and the regional examples chosen for the assessment. They loosen up the text, and make it more colorful and better comprehensible. Please ensure, though, that they are distributed evenly between all sub-regions throughout the assessment in order to better reflect the different sub-regions and their expertise. Some sub-regions (and/ or countries) seem a little under-represented at this stage. This especially holds true for the West Asian sub-region as well as some tropical countries with a particular high biodiversity such as the Philippines, Papua-New Guinea and countries in the subtropical and temperate zone of the Asia Pacific region like Iran and Mongolia.	Thank you. We have hopefully improved this in the revisions, but acknowledge the difficulty in ensuring even representation of all subregions due to lack of expertise or of data.
Uta von Witsch & Ludwig Kammesheid, IB & Stefan Hotes	general					Congratulations and thanks to all who contributed to this first draft version which can serve as a valuable baseline study. Aspects such as SDGs and the Aichi targets, which are of importance also for the global assessment, are explicitly addressed. We therefore believe that this reg. assessment will also be highly useful for the global assessment. Furthermore, the text is well balanced (not biased) and not policy prescriptive (indications are made in the comments below should this not be the case). These aspects are very much welcomed.	Thank you.
Uta von Witsch & Stefan Hotes	General					An executive summary at the beginning of the assessment as well as short abstracts/ introductions at the beginning of each chapter would be welcomed. This would, to our opinion, improve the readability of the assessment and also the harmonization between chapters (see also next comment on this aspect). The same applies to the conclusions (especially the key findings and the policy options) which - where already included in the assessment - are very helpful and highly appreciated. Furthermore, it would be welcomed if all main findings within the abovementioned sections could be linked explicitly to the different respective sections of the assessment which they are referring to.	An Executive Summary has been added to the chapter during the revision.
Uta von Witsch & Stefan Hotes	General					It might be a good idea for the different chapter-teams to interact more closely. This could help to harmonize the chapters, to keep up the common thread, and to avoid redundancies and unnecessary repetitions.	Thank you for the suggestion.
Uta von Witsch & Stefan Hotes	General					All regional assessments should follow the same definitions and (e.g.) classifications of ecosystem services. These aspects are important for the comparability of the results, especially since they all provide input for the IPBES global assessment (see also next comment on this aspect). Please ensure this is the case by cross checking with the other reg. assessments. Furthermore, sections on classifications and terminology of biomes and ecosystems should make better use of the more stringent ones already compiled for applied purposes e.g. in the case of wetlands (Ramsar Convention).	Co-chairs and CLAs have tried to ensure this during the internal review of drafts of all chapters
Uta von Witsch & Stefan Hotes	General					Sections addressing general aspects that are of (the same) importance to all reg. assessments - like e.g. "What is a value system" (section 2.2.1, p. 11, lines 425-436), "The concept of living in harmony with nature ..." (section 2.2.1.2, p. 11, lines 438-459) and "Factors affecting the change in value systems" (section 2.2.2.1, p. 13, line 557 to p. 15, line 628) - should be identical for all reg. assessments. This will ensure a common basis and is important for the comparability of the results. Please ensure this is the case by cross checking with the other reg. assessments. These general (and global) sections could furthermore be kept as short as necessary for their understanding within the reg. assessment. They seem a little over-emphasized at this stage. All in all, the assessment might focus more on the Asia-Pacific region.	Co-chairs and CLAs have tried to ensure this during the internal reviews, and also by incorporating into chapter 1 some introductory text which was standardised across all regional assessments.
Wang Changyong	General					I think that Chpt 6 is not suitable for my review. But It is too academic and read like academic paper. So need to be readable to decision-maker. (suggesting Mr Qin Tainbao who is the lead author of Chpt6 review the Chpt6).	Thank you. We have hopefully improved this in the revisions.
Wang Changyong	General					Suggestion: discuss how to further collect data and information from most of Asia Pacific countries. For instance, increasing contributing authors, using questionnaire to collect key data (eg status and trend) at national level	Thank you for the suggestion.
Yasushi Hibi	General					A section on financial needs in meeting GBT2020 should be included, highlighting the CBD high-level panel reports as well as CBD GEF needs assessment.	Given the timeline of the assessment, the more focus has been placed on SDGs.

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Hwan-ok Ma	Chapter 6	1	1	1	3	Perhaps a need to refine the title of this chapter. The wording of "Options for" might be refined as this chapter's objectives include clear recommendations for mainstreaming BES. For example it could be "Enabling Governance .....". The roles of the private sector and partnerships are mentioned but strong (political) commitments from decision-makers seem to be crucial. In light of this, it may consider "Enabling Governance, Institutional Arrangements and International Commitments for Mainstreaming BES".	The title cannot be freely changed but has been updated through consultation across regions.
Pifu CONG	Chapter 6	1	1	48	2184	In chapter 6, the options and suggestions should be proposed on basis of the analyses of Status, trends and future dynamics of the biodiversity in APR in chapter 3. They should be the valuable key parts of the report. They should be both scientific and operational. It is advised to include more economists and sociologists to propose more valuable and specific suggestions for the governments and stakeholders.	Thank you for the comment. We have attempted to improve linkages with previous chapters.
Hwan-ok Ma	Chapter 6	2	47	1	56	These might be omitted or numbering for these items could be made	Thank you. The text has been revised accordingly.
Hwan-ok Ma	Chapter 6	2	58	1	68	It might be better if Section 6.8 locates before Section 6.7 (Identifying and ..)	Thank you. The chapter has been restructured extensively.
Hwan-ok Ma	Chapter 6	2	68	2	68	It would be useful to consider adding 'technology transfer' as it is important for many developing countries.	Thank you. The chapter has been restructured extensively and importance of technological advancement has been woven in.
Ram Pandit	Chapter 6	4	88	4	92	Of course, the section will be expanded. But it is not clear at this stage what is meant by socio-polical dimensions of BES? How different social context or political context affect BES and (in some cases, perhaps) BES affect socio-political context?	Thank you. The chapter has been restructured extensively.
LOO MIN JET	Chapter 6	4	93	4	93	Include: ASEAN & GMS initiative	Thank you. The text has been revised.
Wang Changyong	Chapter 6	4	94	5	146	The situation for entry into CBD etc may be mentioned	Thank you. The text has been revised.
Ram Pandit	Chapter 6	4	96	4	120	SDG 2015 and its 17 goals are missing in this discussion. It needs to be incorporated. Also, the global treaties/institutions or regional treaties/institutions specific to BES need to be explored	Thank you. The text has been revised and restructured to cover these aspects.
LOO MIN JET	Chapter 6	5	138	5	138	Include: GMS, Heart of Borneo, ASEAN mechanism	Thank you. The text has been revised.
Hwan-ok Ma	Chapter 6	5	148	5	157	In the context of NBSAP, case studies or summery of selected national BES policy developments in AP region would be useful. As the discussion of the role of private sector is focused on community-based integrated management systems, an overall picture of the important role of the private sector seems to be narrow downed.	Thank you. The text has been updated accordingly but also restructured extensively.
Wang Changyong	Chapter 6	5	148	6	191	Information in the part seems to not present "Role of National, sub-national, and private sector"	Thank you. The chapter has been restructured extensively.
Ram Pandit	Chapter 6	5	150	6	191	The assessment of the role of private sector in BES needs to be expanded	Thank you. The text has been revised accordingly.
LOO MIN JET	Chapter 6	5	171	5	171	Refer also to PFES in Vietnam	Not clear what this acronym is.
Cameron Colebatch	Chapter 6	6	176	6	177	Institutional arrangements have been established in Australia.	Thank you for the suggestion. The text has been revised and no longer fits the same phrasing.
Uta von Witsch	Chapter 6	6	179	6	181	Maybe you could include the case study on Andra Pradesh as an example for a "good-practice solution" (e.g. in a seperate box within the text). This could loosen up the text and make it more concrete.	Thank you for the suggestion. The text has been revised accordingly.
Cameron Colebatch	Chapter 6	6	183	6	183	Could possibly reference Australia's Murray Darling Basin Plan and <i>Water Act 2007</i> as examples of institutional arrangements that do give consideration to ecosystem water requirements.	Thank you for the suggestion. The text has been revised accordingly.
Uta von Witsch	Chapter 6	6	189	6	190	Maybe you could provide some examples of these tools and the new models emerging, e.g. in a Table. This could add to the vividness of the text. (If you are referring to models as in "modelling", you might also want to include these models in Chapter 5 which makes use of scenarios and modelling in its analysis.)	Thank you for the suggestion. The text has been revised accordingly.

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Ram Pandit	Chapter 6	6	196	7	214	governance first the nature of BES governance in AP region is needed, then discussions on changing governance and associated factors make a better sense. Also the text is descriptive rather than critical appraisal of BES in the region	Thank you. The chapter has been restructured for a better flow.
LOO MIN JET	Chapter 6	7	235	7	235	Include: UNEP-IEMP's capacity building framework in the GMS	Thank you. The suggestion has been considered taking into account overall balance.
Uta von Witsch	Chapter 6	7	251	7	260	You might want to add the specific sub-sections of the assessment which you are referring to. This would make it easier to follow.	Thank you for the suggestion. We have tried to be more specific in referring to sections.
Ram Pandit	Chapter 6	7	262	7	292	Is this section fit here? This is covered in earlier chapters. It is better to expand earlier sections with representative case studies to capture the diversity of AP region. Alternatively, the section heading may need to be specific to the content, I feel that is the case here?	Thank you. The chapter has been restructured for a better flow.
Cameron Colebatch	Chapter 6	8	279	8	283	It needs to be recognised that the approach of Australia is science-based risk assessment.	Thank you for the suggestion. The text has been revised and no longer fits the same phrasing.
LOO MIN JET	Chapter 6	8	286	8	286	Include: ecotourism and poverty alleviation	Thank you. This has been incorporated in the extensive revisions.
Ram Pandit	Chapter 6	8	299	8	317	This is a bit generic text. I think more specificity is needed, perhaps with examples. Some local, regional and national policy settings needs to be examined perhaps.	Thank you for the suggestion. We have attempted to add specificity where possible.
Ram Pandit	Chapter 6	8	321	9	359	I think the general introduction of the policy imperative of the region should appear in Ch 1, perhaps. Either the assessment of that from social and political lenses would help here or elaborating the policy context of the region (earlier section) should be suffice. I am not clear on value addition by this sub-section. Also, the latest situation needs to be evaluated; the references cited are relatively old.	Thank you. The chapter has been restructured for a better flow.
Ram Pandit	Chapter 6	9	333	9	334	Specific change with the time frame would help here. The statement is quite generic.	Thank you. The text has been revised extensively.
Hwan-ok Ma	Chapter 6	9	346	5	346	The authors could add more references. A consistent presentation on a major driver for biodiversity loss would be useful. Since weak governance seems to be too general, more elaboration might be useful. On page 30 (Line 1394-1396), it is worthwhile to note a challenge of limited capacity for mainstreaming BES into sectoral policy-planning and effective implementation different biodiversity related MEAs.	Thank you for the suggestion. The text has been revised accordingly.
Ram Pandit	Chapter 6	10	390	12	479	One of the aspects that needs to be strengthened is the inclusion of traditional norms or belief system into management of BES. Given the diverse socio-cultural setting of AP region, this aspect needs to be emphasised as a policy approach perhaps. Also, polycentric policy approach; engagement of private-public partnership in BES management etc are worth considering. How about use of policy instruments: legal/regulatory?, financial/economic, rights-based approach; social-cultural etc...	Thank you. The text has been revised extensively to incorporate this aspect.
Uta von Witsch	Chapter 6	10	393	12	479	This overview provides a welcome first impression on how policy options might be framed in the region.	Thank you.
Ludwig Kammesheidt, IB (& Uta von Witsch)	Chapter 6	10	398	10	400	It seems difficult to generalize upon this point. Decentralization and devolution policies do not necessarily always achieve positive outcomes for the environment. Please ensure to consider this issue from all sides; especially since this section is reflecting on possible policy options.	Thank you. This has been acknowledged in the updated text on national policies and local strategies.
LOO MIN JET	Chapter 6	10	411	10	411	Please include UNEP-IEMP's ESA reports, some key findings in the GMS, consulting local people on ecosystem services in PA	Thank you. The suggestion has been considered taking into account overall balance.
Hwan-ok Ma	Chapter 6	10	423	10	423	This section could be expanded with more regional initiatives including haze, HoB,,,	Thank you for the suggestion. The text has been revised accordingly.
Ludwig Kammesheidt, IB	Chapter 6	10	423	11	430	You might want to include the 'Heart of Borneo' initiative.	Thank you for the suggestion. The text has been revised accordingly.
LOO MIN JET	Chapter 6	11	431	11	431	Include: Heart of Borneo and other thematic issues	Thank you for the suggestion. The text has been revised accordingly.
Ludwig Kammesheidt, IB	Chapter 6	11	445	11	445	Please explain what is meant by "... generating bundles of ecosystems services ...".	Thank you. The text has been revised and no longer uses the phrase.

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Ludwig Kammesheidt, IB	Chapter 6	12	490	12	491	"... top-down policy is common in most Asian developing countries." Maybe this should not be confined to developing countries.	Thank you. The text has been revised and no longer uses the phrase.
LOO MIN JET	Chapter 6	13	571	13	571	What is endemism in ecosystems? Please check	Thank you. The text has been revised and no longer uses the phrase.
Ludwig Kammesheidt, IB	Chapter 6	13	578	13	578	You might also want to discuss the effects of initiatives such as the one billion dollar pledge of the Norwegian government for the conservation of Indonesian primary forests in this context (for reference see e.g.: DP Edwards et al. (2012): Indonesia's REDD+ pact: Saving imperilled forests or business as usual? Biological Conservation 151: 41-44).	Thank you. The suggestion has been considered taking into account overall balance.
Ram Pandit	Chapter 6	14	580	14	620	The text refers to different form of policy tools/instruments. I think biodiversity offset is one of the evolving tool, there are other incentives for example government subsidy; or tax etc. how they affect BES in the region may be worth considering. In fact - policy tools/incentives needs to be elaborated...	Thank you for the suggestion. The text has been revised accordingly.
Cameron Colebatch	Chapter 6	15	638	15	640	Suggest this statement regarding afforestation and deforestation rates be referenced.	Thank you. The text has been revised and no longer uses the phrase.
Uta von Witsch	Chapter 6	16	686	16	687	The envisioned Table 6.2 on "BES related programmes at various levels and their major features, challenges and opportunities" seems very important and is highly welcome.	Thank you. Due to restructuring it has been moved to Table 6.3.
Penny van Oosterzee	Chapter 6	16	689	18	818	This is simply a list of organisations that have formed. The section is mostly unreferenced and doesn't inform the success or otherwise of the approaches.	We have restructured and added significant amount of text but have retained an overview to set the scene
Uta von Witsch	Chapter 6	16	689	18	818	Maybe one or two Tables could be included to visualize the findings and examples of this section (6.5.1).	Thank you for the suggestion, which has been followed.
LOO MIN JET	Chapter 6	16	691	16	691	Is is seven new initiatives? Please check	Thank you. The text has been revised and no longer uses the phrase.
LOO MIN JET	Chapter 6	17	743	17	743	Refer also to Heart of Borneo	Thank you for the suggestion. The text has been revised accordingly.

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Dr. Santosh Kumar Mishra	Chapter 6	18	820	20	904	<p>Before start of 6.5.3 Local level actions (page 20, line 906), add following information:</p> <p><b>6.5.2.1 Key Issues and Challenges in Integrated Coastal Management (ICM) Initiatives:</b> Coastal Management (ICM) practitioners need to pay attention to the causes of environmental problems. Concerted efforts are needed to address them in the development and implementation of ICM programmes as the conditions in each level of local government and locality might differ. ICM addresses the key issues relating to economic development, environmental governance and management of human behaviour. These issues are of strategic significance as they relate to the socioeconomic well-being of the coastal areas, sustainability of ecosystem services and effectiveness of policy and management interventions. The following are the key issues that need to be considered collectively:</p> <p><b>Development issues affecting social, economic and environmental sustainability:</b> Economic development on land and sea is the primary cause of biodiversity loss, environmental quality degradation, and loss of ecosystem services. On the other hand, economic development is indispensable, considering that half of the world population resides in coastal areas and that the people living there need to sustain their health and livelihood and improve their standard of living. As such, ICM efforts are directed toward preventing or minimizing the negative environmental and social impacts of economic development by incorporating environmental and biodiversity conservation concerns into the government economic agenda so that development issues are being considered in a more balanced manner. This is done through integrated coastal planning, such as land- and sea-use planning as well as marine spatial planning. The conventional policy of "development first and environmental protection later", though still being practiced in many countries of the world, is certainly no longer a wise choice as ecosystem restoration will certainly cost more, especially when the loss of certain ecosystem services might not be recoverable.</p> <p><b>Coastal governance issues requiring regulation of human behaviours affecting environmental sustainability:</b> This is a challenging policy issue requiring a host of financial, legislative and administrative measures aimed at effectively regulating and managing human activities on land and at sea. A major focus in ICM is to develop the appropriate policy to guide sustainable coastal development through legislation and ordinances to control human activities such as fishing, sand mining, land reclamation, habitat conversion, discharge of wastes from land and sea and other activities that are potentially harmful to human and ecosystem health.</p> <p>ICM instigates the development and implementation of comprehensive coastal and marine strategies and results-oriented action plans to address key environmental management issues. It sets up institutional arrangements to promote interagency cooperation and collaboration and implement communication plans to increase public awareness for gaining stakeholder support. At the same time, ICM prepares the local government to develop human and financial capacity for long-term implementation of ICM programmes through the processes of the ICM cycle.</p> <p><b>Coastal and marine environmental issues that affect human and ecosystem health:</b> Environmental threats have increasingly endangered the lives, health and properties of people living in coastal areas. Some of these threats may either be of sporadic or frequent occurrence, challenging human response capability and resilience to deal with the impacts. ICM addresses issues arising from both natural and human-induced disasters, pollution from land and sea, destruction of natural habitats, such as mangroves, watersheds and coral reefs, and overexploitation of natural resources leading to loss of livelihoods, biodiversity and ecosystem services. ICM develops and implements long-term strategies and action plans to address specific environmental concerns. Environmental management issues are usually complicated, and their resolution requires:</p> <p>a) time, b) money, c) scientific advice, and d) human resources.</p> <p><b>Financial issues relating to mobilization of financial Resources:</b> Environmental governance and management both require substantive financial support for implementing ICM initiatives, especially those activities requiring considerable investments for:</p> <p>a) environmental improvement infrastructures (e.g., habitat restoration, sewage treatment facilities, landfills for solid wastes, incineration facilities for toxic wastes, freshwater supply treatment facilities); b) facilities for disaster response; and c) climate change mitigation.</p> <p>Governmental budgetary allocation is no longer able to cope with the large investment needed. However, turning environmental improvements into business ventures in a green economy will make it possible to tap into the huge financial resources and expertise of the private sector.</p> <p><b>Information issues relating to use, storage, processing, dissemination, communication, management and data generation:</b> Inability to utilize fully the power of communication often results in poor public awareness, mistrust among stakeholders, weak interagency coordination and ineffectiveness in plan implementation. The basic element of communication is information. A good communicator is one who can effectively use information through various communication tools to present a convincing story for a specific purpose. In the case of ICM, information plays a very important role in:</p> <p>a) identifying issues; b) determining priority; c) building consensus;</p>	Thank you. The suggestion has been considered taking into account overall balance.

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Dr. Santosh Kumar Mishra+A64	Chapter 6	18	820	20	904	<p>(continued from above)</p> <p>d) developing legislation;</p> <p>e) setting goals and objectives;</p> <p>f) influencing decision-making; and</p> <p>g) forming the database for policy, strategies and management action programmes.</p> <p>ICM effectively utilizes information, transforms and packages them into visible products, and disseminates them through its communication plans to reach out to the public and the relevant stakeholders. A common challenge in coastal management is that a large database/information-sharing mechanism is needed, which cuts across different sectors and disciplines. A great deal of primary data has already been gathered by various line agencies or research institutions for their specific use. Such databases are normally not available to other users and are difficult to obtain. The purpose of ICM is to secure these databases from concerned line agencies and institutions through the processes of the ICM cycle. This information is further analyzed to identify data gaps, consolidate past findings and discern initial environmental management issues. The processed information is then presented to the stakeholders and the public in general in the form of a coastal profile. ICM uses this information as the basis for undertaking other information-gathering activities in the development of the first generation of strategies and action programmes.</p> <p>Data-gathering requires a variety of expertise and specialized skills, and the exercise will need to source from other agencies and research institutions. The challenge is how to utilize the expertise and skills to formulate management policy and programmes that can be implemented successfully on the ground.</p> <p>Over the last two decades, ICM has been widely adopted, tested and implemented in many different countries. Realizing the cultural, political, ecological and socioeconomic interconnectivity in a given area, ICM practices follow a systematic approach in the planning of coastal and marine uses as well as in the integration and coordination of action programmes for addressing prioritized environmental management and other concerns related to sustainable coastal development. Hence, ICM has evolved into a coastal management system with standardized methodologies that can be adopted for addressing similar sustainable development concerns in other coastal and marine areas. Building upon the concept, principles and practices of other coastal management approaches and tools, the ICM system has greatly enriched its operational procedures so it can be more cost-effective in achieving its goals and objectives.</p> <p>ICM is generally operated within the jurisdiction of the local government. As the national policy and legislation governing the functionality of local governments vary from country to country, the capacity of local governments to develop and execute ICM programmes might be restricted, especially with regard to the power to legislate or to allocate a budget and human resources. However, local governments who are concerned with sustainable development challenges can still implement the ICM programme especially because of local-level dynamics. In fact, they could be equally, if not more, efficient and effective through innovative financing and partnerships with the private sector and other non-governmental stakeholders. In recent years, there has been an increase in the number of countries throughout the globe that have devolved the responsibilities for environmental management and sustainable development to their local authorities. In the year 2012, the UN Secretary General in reference to the outcome document of the Rio +20 Conference, "The Future We Want", made special reference to the vital role of local government in achieving sustainable development. His famous quote "Global is local and local is global" should guide the working philosophy of local governments around the world.</p> <p><b>Reference:</b> Secretariat of the Convention on Biological Diversity (2015). Integrated Coastal Management for the Achievement of the Aichi Biodiversity Targets: Practical Guidance for Implementation Based on Experience and Lessons Learned from Coastal and Ocean Governance in the Seas of East Asia. Technical Series No. 76. Montreal, Canada: Secretariat of the Convention on Biological Diversity.</p> <p><b>Annotations:</b> I find the above information useful as coastal management practices in the marine and coastal areas have gradually evolved over the last several decades in the following manner:</p> <p>a) From simple, traditional or indigenous community-based management practices to issue- or sector-specific or natural resource-based management practices;</p> <p>b) From single-issue or single-sector management practices to multiple-issue, cross-sector management practices; and</p> <p>c) From loosely organized coastal management practices to more systematic, legally-based integrated management practices.</p>	Thank you. The suggestion has been considered taking into account overall balance.
Uta von Witsch	Chapter 6	18	820	20	904	Maybe a Table could be included to visualize the examples and findings of this section (6.5.2).	Thank you for the suggestion.
LOO MIN JET	Chapter 6	19	850	19	850	5) UNEP-IEMP (2016). A Summary for Policy-makers and Stakeholders: Ecosystem Services and Management Assessment in Nabanhe Watershed National Nature Reserve, Xishuangbanna Dai Autonomous Prefecture, Mekong Upstream, China (Refer to assessment in China)	Thank you. The suggestion has been considered taking into account overall balance.
LOO MIN JET	Chapter 6	20	905	20	905	No coherence	The text has been revised accordingly.
Penny van Oosterzee	Chapter 6	20	906	22	1007	Not referenced and there's no case studies of projects.	The text has been revised accordingly.
Uta von Witsch	Chapter 6	22	1014	22	1015	"... mixes aimed at influencing institution and governance systems ... and those aimed at influencing direct drivers of change ...". 'Influencing' might sound a little too prescriptive. Maybe you could rephrase this section (e.g.: "...mixes <b>directly addressing</b> institutions and governance systems ... and those <b>targeting</b> direct drivers of change ...").	Thank you. The text has been revised and no longer uses the phrase.
Penny van Oosterzee	Chapter 6	23	1047	23	1050	But these examples are all dated.	The text has been revised accordingly.
Penny van Oosterzee	Chapter 6	23	1075	24	1102	Great case study.	Thank you.
Uta von Witsch	Chapter 6	23	1075	26	1206	The examples given in the boxes are very welcome. They loosen up the text and illustrate the findings.	Thank you we have tried to retain the box examples.
Penny van Oosterzee	Chapter 6	25	1139	25	1139	Be good to see if these actually work in a place like Australia.	Evaluation at national level was beyond the scope
Uta von Witsch	Chapter 6	26	1208	30	1368	Within IPBES, it is very essential to include and address different world views. In this section (6.6.2) there are very many references to TEEB. Please ensure that the different world views have been considered adequately in spite of this strong focus on one/ the TEEB analysis. Or please provide an explanation why this focus was chosen.	Thank you. We have attempted to broaden the coverage.

Reviewer Name	Chapter	From Page	From Line	To Page	To Line	Comment	Response
Uta von Witsch	Chapter 6	26	1208	30	1368	We believe that additional case studies could be very helpful in illustrating the findings of this sub-section (6.6.2).	The text has been revised accordingly.
Uta von Witsch	Chapter 6	27	1254	27	1256	Please include "... and <b>possible</b> future direction of policy mixes..."; this makes it sound less prescriptive (which the IPBES assessments should not be).	Thank you. The text has been revised and no longer uses the phrase.
Cameron Colebatch	Chapter 6	32	1297	32	1298	The recent report referred to needs to be referenced	Thank you. The text has been revised and no longer uses the phrase.
Hwan-ok Ma	Chapter 6	32	1425	32	1425	Forest could be included in the linkage between BES as forest degradation implies a significant impact to habitat loss and decline of ES.	Thank you. They are covered in the revised structure as a subsection.
Ram Pandit	Chapter 6	33	1486	38	1714	Do we need goal specific discussion. In fact these goals are just proposed in 2015, we can't evaluate what is happening to these goals. Certainly we can link the over all analysis in line of these goals. May be better to be concise here too.	Thank you. The text has been revised extensively to incorporate this aspect.
Uta von Witsch	Chapter 6	34	1537	37	1645	Is there a specific reason why SDG 15 is not included in this section? Including SDG 15 might provide very important and valuable input. Please take this into consideration.	The text has been revised extensively and considers the synergies and tradeoffs of SDGs 14 and 15 with other SDGs.
Uta von Witsch	Chapter 6	36	1629	36	1630	You might want to include cross references to the specific sections of this reg. assessment dealing with these aspects.	Thank you. This has been incorporated in the revisions.
Hwan-ok Ma	Chapter 6	37	1647	37	1647	Before this section, it might be desirable to refer SDG 15 (life on land)	Thank you. This has been incorporated in the revisions for SDG 14 and 15.
Hwan-ok Ma	Chapter 6	38	1721	38	1722	In line with the importance of taking adaptation measures, the authors could elaborate and explain a little bit further adaptation challenges	Thank you for the suggestion. This has been considered taking into account the overall balance in restructuring the chapter.
Ram Pandit	Chapter 6	39	1777	47	2125	I think this section is very good, but need to be condensed for space.	Thank you for the suggestion, which has been followed using a box.
Hwan-ok Ma	Chapter 6	40	1816	41	1818	I am wondering whether many examples of incentives, disincentives, indirect incentives and removal of perverse incentives under Table 6.7 could be categorized systematically under a different type of economic, legal, institutional, voluntary measures and others, as appropriate.	This has been summarised into a box.
Uta von Witsch	Chapter 6	41	1820	41	1821	Envisaged Table 6.8 sounds very promising and helpful.	This has been elaborated in text rather than a table.
Pifu CONG	Chapter 6	41	1822	41	1822	There is no title in line 1822 before" 6.9.1.1 Usufruct Right."	Thank you. This has been revised accordingly.
Hwan-ok Ma	Chapter 6	42	1902	42	1904	Examples of PES for watershed protection may not include the cases of China (Pandas) and India (CDM). Since several types of PES are taking place in the region, a little expanded elaboration would be useful.	Thank you. This has been revised accordingly.
Hwan-ok Ma	Chapter 6	42	1912	42	1912	it is general understanding that the Kyoto Protocol's CDM is very limited linkage with biodiversity mitigation and offsets.	Thank you. This has been considered in the revision.
Hwan-ok Ma	Chapter 6	43	1939	43	1939	Indonesia Ecolabelling Institute is currently not working well. Legality assurance is emerging a challenge in Indonesia under EU-Indonesia Voluntary Partnership Agreement	Thank you. It would have been helpful to have a source to cite.

Reviewer Name	Chapter	From Page	From Line	To Page	To Line	Comment	Response
Dr. Santosh Kumar Mishra	Chapter 6	45	2041	45	2064	<p>Before start of Monitoring, Compliance and Enforcement (page 45, line 2066), add following information:</p> <p><b>Community Based Ecotourism Initiatives in Asia Pacific: Case of Responsible Ecological Social Tours (REST) Project, Thailand:</b></p> <p>The terms community-based tourism (CBT) and community-based ecotourism are commonly used to describe the type of tourism that, recognizing the significant social, environmental and economic impacts tourism can have, primarily focuses on tourism's benefits to the local communities. According to WWF International, community-based ecotourism takes the social dimension of ecotourism a stage further, by developing "a form of ecotourism where the local community has substantial control over, and involvement in, its development and management, and a major proportion of the benefits remain within the community". Community-based ecotourism, therefore, fosters sustainable use of land and natural resources. Moreover, it embraces both collective responsibility and individual initiatives within the community. While the definition and usage of the terms CBT and community-based ecotourism may vary from one country or region to another, what matters most are not the names, but the principles of social and environmental responsibility behind the action.</p> <p>The Responsible Ecological Social Tours (REST) is a non-governmental organization that works with communities throughout Thailand, helping grassroots groups develop and manage alternative community based tourism (CBT) programs. CBT fosters community empowerment and builds community capacity by creating sustainable, environmentally responsible livelihoods opportunities for grassroots groups (<a href="http://www.jeef.or.jp/EAST_ASIA/?job_listing=responsible-ecological-social-tours-project-rest">http://www.jeef.or.jp/EAST_ASIA/?job_listing=responsible-ecological-social-tours-project-rest</a>, accessed on June 15, 2016). The REST Project works to assist local Thai communities in developing their own small-scale sustainable tourism projects which aim to:</p> <ul style="list-style-type: none"> <li>a) develop the skills and confidence of local community members,</li> <li>b) create an opportunity for host communities and their guests to share their knowledge and experiences, and</li> <li>c) develop their commitment to protect the natural environment.</li> </ul> <p>According to REST, one of the most important aspects of CBT is that "communities choose how they wish to present themselves to the world". REST's CBT projects support grassroots conservation activities and promote environmental awareness. Best examples include (<a href="https://www.ecotourism.org/news/community-based-ecotourism-asia-pacific-best-practice-stories-and-resources">https://www.ecotourism.org/news/community-based-ecotourism-asia-pacific-best-practice-stories-and-resources</a>, accessed on June 15, 2016):</p> <ul style="list-style-type: none"> <li>a) In Koh Yao Noi, CBT income has directly supported a local conservation club's coastal patrols to prevent illegal fishing.</li> <li>b) In Koh Yaow Noi, CBT has helped improved the local environment through mangrove rehabilitation plots and seagrass protection.</li> <li>c) In Mae Hong Son, local farmers have begun re-introducing wild orchid species into areas of the forest which had previously been deforested.</li> </ul> <p>The REST team currently brings over a decade of practical experience to the process of realizing community based tourism as a sustainable development strategy. It uses the initiative as an educational tool to facilitate environmental and cultural awareness, commitment and action. The REST works as partner with local communities who wish to develop CBT. By managing small scale tourism projects, community members are developing their skills and capacity and assuming an active role in tourism and in their own self-determined development. The REST's key role is to provide training and technical assistance throughout the ongoing CBT process. Consequently, the REST has been involved in all stages of the development of CBT:</p> <ul style="list-style-type: none"> <li>a) choosing potential sites,</li> <li>b) community education and preparation (including organizing community study tours to visit existing CBT sites),</li> <li>c) participatory planning and establishing shared goals for CBT,</li> <li>d) developing a range of environmentally and culturally sensitive tourism activities,</li> <li>e) sharing responsibility for feedback, monitoring and evaluation, and finally</li> <li>f) marketing and promotional assistance so that community based tourism reaches community based tourists.</li> </ul> <p>The Community based Tourism Club of Koh Yao Noi, Phang Nga Province, Thailand, and the REST have worked together for over 12 years to develop a model of tourism for conservation, community development, and cross-cultural sharing. CBT activities have been planned and managed by local fishers, sharing local life, celebrating local culture, developing local skills and building environmental awareness among guests and hosts (<a href="http://www.eastwestcenter.org/fileadmin/resources/seminars/40th_anniversary/KohYaoNoi_Trip.pdf">http://www.eastwestcenter.org/fileadmin/resources/seminars/40th_anniversary/KohYaoNoi_Trip.pdf</a>, accessed on June 15, 2016).</p> <p><b>Annotations:</b> Above information on community-based tourism (CBT) as a case study of the Responsible Ecological Social Tours (REST) Project in Thailand is useful and quite informative. I will help in understanding the importance of CBT initiatives in different settings.</p>	Thank you. The suggestion has been considered taking into account overall balance.
Hwan-ok Ma	Chapter 6	45	2060	45	2061	Mangrove ecotourism is more popular with birdwatching. An example, Madang mangrove ecotourism in Malaysia is good with migratory birds (i.e. egrets, storus).	Thank you for the insight.
Uta von Witsch	Chapter 6	46	2085	47	2125	In Section 6.9.1.6 (p. 46, lines 2087-2089) you state that incentives which are harmful to biodiversity and emanate from policies or practices that result in biodiversity loss due to the side-effects of policies were called 'perverse' incentives in the past. The heading of the next section (6.9.1.7, p. 46, lines 2103ff) is "perverse incentives", though. This is confusing. Please clarify.	The two terms are used interchangeably but with the restructuring it is no longer a header, which hopefully eliminates confusion.
Pifu CONG	Chapter 6	47	2127	47	2127	In line 2127, 6.8.2 should be 6.9.2. and the following sequence number should be revised too.	Thank you. This has been revised accordingly.
Danesto B. Anacio	Chapter 6	47	2136	47	2136	"Risk communication" repeated as a disaster risk reduction policy.	Thank you. This has been revised accordingly.

Reviewer Name	Chapter	From Page	From Line	To Page	To Line	Comment	Response
Dr. Santosh Kumar Mishra	Chapter 6	47	2149	47	2158	<p>After end of first paragraph under 6.8.3 Knowledge and Capacity Gaps (page 47, line 2158) and before start of sentence: There are very few completed or ongoing national assessments of ecosystem services and how they..., [page 47, line 2160] add following information:</p> <p>Selected examples key areas <b>knowledge/information gaps</b>  (<a href="http://web.unep.org/adaptationgapreport/sites/unep.org/adaptationgapreport/files/documents/annex_c_final.pdf">http://web.unep.org/adaptationgapreport/sites/unep.org/adaptationgapreport/files/documents/annex_c_final.pdf</a> , accessed on June 15, 2016) are:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Measuring and mapping vulnerability</li> <li><input type="checkbox"/> Developing and strengthening indicator and monitoring systems</li> <li><input type="checkbox"/> Understanding risks of extreme events, non-linear impacts and tipping points</li> <li><input type="checkbox"/> Developing integrated (cross-disciplinary) solutions to maximize co-benefits</li> <li><input type="checkbox"/> Identifying factors that support or hinder vulnerability reduction and adaptation</li> <li><input type="checkbox"/> Conducting focused research on implementation</li> <li><input type="checkbox"/> Improving approaches for valuing adaptation</li> <li><input type="checkbox"/> Advancing criteria for prioritizing adaptation strategies</li> <li><input type="checkbox"/> Conducting studies on communication, participation and capacity building</li> <li><input type="checkbox"/> Determining how communication between the research community and policy-makers can be more effective</li> <li><input type="checkbox"/> Advancing research on lessons learned from developing country experiences and local and traditional knowledge</li> <li><input type="checkbox"/> Resources on addressing water shortage, loss of livelihoods, decreased food security, and damaged ecosystems</li> <li><input type="checkbox"/> Socio-economic, cultural, and psychological impacts of climate change</li> <li><input type="checkbox"/> Integration of disaster risk reduction and biodiversity conservation into adaptation</li> <li><input type="checkbox"/> Resources on how to achieve co-benefits of climate change mitigation and adaptation</li> </ul> <p><b>Annotations:</b> The above information depicts the broad areas in which knowledge/information gap exists.</p>	Thank you. The suggestion has been considered taking into account overall balance.
Hwan-ok Ma	Chapter 6	47	2153	47	2154	I think "lack of willingness among the policy makers...." is outcome from 'limited knowledge and experience on how to utilize the traditional knowledge...'	Thank you for the comment.
Uta von Witsch	Chapter 6	48	2181	48	2181	A punchy summary would be very much welcomed for chapter 6, summarizing the main findings and options, and including cross references to the chapters (as well as the sections of chapter 6 itself) where these aspects are treated in detail. This could be included in the 'conclusions'.	Thank you. The Executive Summary serves this purpose.