



8th Meeting of the Western Indian Ocean Marine Turtle Task Force

Synthesis of Existing Recommendations for the WIO Sub-region

Introduction

This is a synthesis of relevant recommendations which serves as a reference and to facilitate the discussion of sub-regional priorities. This will feed into the discussion and drafting of the IOSEA Work Programme at the 8th Meeting of Signatories to the IOSEA Marine Turtle MOU. It contains recommendations extracted from the following documents:

- Report of the Seventh Meeting of IOSEA Signatory States (MOS7 Meeting report), including MOS7 Action Points (Annex 8) and Priority Projects resulting from the updated Loggerhead (2013) and Leatherback (2012) assessments (Annex 7, Appendix IV and V)
- Several MOS7 Documents:
 - Further Development of the IOSEA Technical Support / Capacity-Building Programme
 - Illegal Take and Trade of Marine Turtles in the IOSEA Region
 - Insights into Indian Ocean Fisheries-Turtle Interactions
 - Socio-Economic and Cultural Implications of Marine Turtle Use and Conservation
 - Marine Turtle Genetic Stocks of The Indo-Pacific: Identifying Boundaries and Knowledge Gaps
- Summary of The Western Indian Ocean (WIO) Working Group Discussions
- Report of the 7th Meeting of The Western Indian Ocean Marine Turtle Task Force (Draft), including Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019

Procedural issues

Sub-regional work plan

The sub-regional work plan needs to be re-worked completely as it no longer reflects the most important sub-regional activities.

The structure of the sub-regional work plans needs to be uniform across sub-regions to ensure easier integration and comparison between regions.

All activities, except one, were agreed to be renewed at the 7th WIO MTTF Meeting.

WIO MTTF Membership

New chair of the MTTF needs to be appointed, after the resignation of the former chair. Recruiting new members who are active in the region is recommended by the AC (AC Secretariat conference call, September 2018).

General recommendations to MTTF chair: to share details of relevant meetings ahead of the meetings with the MTTF members.

Recommendation	Lead / responsible	Source	Supporting documents	Subject / corresponding CMP objective	Notes / priority level if known
1a. Task Force members should establish working relationships with their respective IOSEA Focal Points.	TF Members	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Implementation support/ Objective 5	
1b. Provide suggestions to and assist their respective national Focal Points on strengthening national committees, networks, working groups or other national arrangements, as appropriate.	TF Members	Work Programme of the Western Indian Ocean – Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Implementation support/ Objective 5	
1c. Assist respective Focal Points with the updating of IOSEA national reports, including identification of specific resource needs.	TF Members	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Implementation support/ Objective 5	
2. Develop a proposal for a compilation of available, relevant information on social aspects of marine turtle conservation in the region, including a literature review as a form of policy brief (guidelines), perhaps to be funded and made available by WWF or WIOMSA, in preparation for a symposium/	TF Chair	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Unique Social Customs and Practices (Social Aspects)/ Objective 1, 1.3 a)	

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workshop (i.e. studies to understand relevance of turtles to people, and their impacts or value).					
3. Request the support of WIOMSA and other regional funding bodies to conduct a regional workshop to assess the social-economic values of marine turtles and compatibility of conservation approaches, including both exploitation (consumptive use) and sustainable ecotourism (live turtles, non-consumptive use).	TF Chair; IOSEA Secretariat; Nairobi Convention; Jack Frazier	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Economic Uses/ Objective 1, 1.3 a), 1.5 d),	
4. From the workshop, produce an annotated bibliography, economic study guidelines and analysis of conservation approaches from the region.	(To be decided at the workshop)	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Economic Uses/ Objective 1, 1.3 a), 1.5 d)	
5. Task Force members are encouraged to work directly with IOSEA Focal Points and relevant stakeholders to complete and improve the quality of data in national reports in relation to fisheries and fisheries interactions, in particular.	TF Members	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Fisheries-Interactions/ Objective 1, 1.1	

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6. Engage RFMOs and other bodies not yet participating to participate in the Task Force, including IOTC, ASCLME, IOC, SWIOFP, etc.	IOSEA Secretariat; Nairobi Convention	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Fisheries-Interactions/Objective 1, 1.4	
7. Liaise with the Indian Ocean Tuna Commission (IOTC) and SWIOFC for data on marine turtle bycatch in purse seining and long lining, including the impact of the use of FADs, and other non-tuna fisheries.	IOSEA Secretariat; Nairobi Convention	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Fisheries-Interactions/Objective 1, 1.1, 1.4	
8. Compile information on the status of on-board observer programmes and the status of marine turtle bycatch recording within those observer programmes in Western Indian Ocean region.	TF Members	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Fisheries-Interactions/Objective 1, 1.4	
9. Explore opportunities for applying market incentives (eco-labelling, certification etc) and role of international bodies and instruments (EU, FAO, CMS, SWIOFC) to enhance compliance in use of bycatch reduction measures.	TF Chair; TF Members; IOSEA T Secretariat	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Economic Considerations	Agreed not to renew this recommendation
10. Compile information on turtle bycatch and inshore fisheries	TF Members	Work Programme of the Western Indian	WIO MTTF 7 draft meeting report	Fisheries-Interactions/Objective 1, 1.1	

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		Ocean – Marine Turtle Task Force: Work Plan 2017-2019			
11. Maintain a record of genetic studies conducted in the region and submit the information to IOSEA Secretariat for posting on the IOSEA website.	TF Vice-Chair;	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Monitoring / Mitigation / Research/Objective 3, 3.4	
12. Provide up-to-date lists of flipper tag series used in the countries for inclusion in the existing IOSEA online database of tag series.	TF Members; IOSEA Secretariat	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Monitoring / Mitigation / Research/Objective 3, 3.1, 3.4	
13. Submit information on satellite tracking studies in WIO countries to the IOSEA Secretariat for inclusion in the Satellite Tracking Meta-database.	TF Members; TF Chair; IOSEA Secretariat	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Monitoring / Mitigation / Research/Objective 3, 3.1, 3.4	Will the satellite tracking meta database be continued?
14. The work plan needs to be re-worked completely, as it no longer provides up-to-date advice to the region (e.g. spatial analysis, habitat modelling)	TF Members; TF Chair; IOSEA Secretariat	Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019	WIO MTTF 7 draft meeting report	Procedural, Sub-regional coordination	
15. Develop a set of standard procedures for data collection on artisanal gill net fisheries and share on IOSEA website	WIO MTTF members	Outcomes, WIO sub-regional group discussion at IOSEA MOS7, MOS7 Report	MOS7 meeting report	Fisheries Interactions, 3.4 a), Information Exchange	

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16. Seychelles to work with Secretariat to augment IOSEA website with FAD information	Seychelles, IOSEA Secretariat	Outcomes, WIO sub-regional group discussion at IOSEA MOS7, MOS7 report	MOS7 meeting report	Fisheries Interactions	
17. Strategies to address domestic trade: a) Engagement of religious leaders for awareness campaigns b) Alternative livelihoods programmes (e.g. livestock keeping) d) Strong enforcement efforts e) Trans-boundary collaboration on education and enforcement f) Legalised take through the application of quotas (needs revised legislation) g) Education of the youth	Not specified	Outcomes, WIO sub-regional group discussion at IOSEA MOS7, MOS7 report	MOS7 meeting report	Strategies to address domestic trade, Objective 1, 1.5, Objective 4, 4.2	
18. Strategies to address international trade: a) Closer collaboration with CITES and other agencies tackling international wildlife crime to ensure issue of marine wildlife trade is on the agenda of future meetings	Not specified	Outcomes, WIO sub-regional group discussion at IOSEA MOS7, MOS7 report	MOS7 meeting report	International Illegal trade, Objective 5, 5.1	

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b) Secretariat-commissioned media materials to raise profile of international trade in turtles, with in-built flexibility to facilitate adaptation to national media by signatory states. c) Establish IOSEA working group to provide active support to Secretariat in progressing IOSEA work and networking on this issue.					
19. Draft a summary of alternative livelihoods projects in each country and submit to WIO MTTF vice chair	WIO MTTF members and chair	Discussion of Advisory Committee recommendations, WIO sub-regional group discussion at IOSEA MOS7, MOS7 report	MOS7 meeting report	Alternative Livelihoods, Objective 4, 4.2	
20. Address challenges to enable widespread genetic analyses of turtle tissue samples in the region, in particular: 1) Obtaining CITES permits to export samples for analysis	Not specified	Discussion of Advisory Committee recommendations, WIO sub-regional group discussion at IOSEA MOS7, MOS7 report	MOS7 meeting report	Collaborative Research and Monitoring, Objective 3, 3.2	

Recommendation	Lead / responsible	Source	Supporting documents	Subject / corresponding CMP objective	Notes / priority level if known
2) Capacity building to enable in-country analysis					
21. Provide technical support to Signatory States to address bycatch, including observer training	Not specified	Discussion of Advisory Committee recommendations, WIO sub-regional group at IOSEA MOS7, MOS7 report	Bycatch mitigation (document MT-IOSEA/SS.7/Doc. 10.4)	Bycatch, Objective 1, 1.4	Bycatch a high priority issue for the region as determined by the discussion group
23. Harmonise the methods and protocols to enable rigorous evaluation of population trends in the sub-region	MTTF members, Chair	Discussion of Advisory Committee recommendations, WIO sub-regional group at IOSEA MOS7, MOS7 report	IUCN Research and management techniques for the conservation of sea turtles	Collaborative Research, Objective 3, 3.4	
24. Identify technical support / capacity-building needs in IOSEA Signatory States	MTTF Members, IOSEA Secretariat	Advisory Committee Meeting 7, recommendations	Technical Support /Capacity-building Programme (document MT-IOSEA/SS.7/Doc. 8)	Capacity Building Objective 5, 5.4	
25. Respond to specific requests for capacity-building support from Tanzania (regarding preparation of a national sea turtle conservation strategy) and from Madagascar (for scientific personnel involved in marine turtle conservation).	Advisory Committee, Secretariat	MOS7 Action Points, also found in Discussion of Advisory Committee recommendations, WIO sub-regional group at IOSEA MOS7	MOS7 report	Capacity Building, Objective 5, 5.4	The request of Tanzania was put on ice for political reasons, is

Recommendation	Lead / responsible	Source	Supporting documents	Subject / corresponding CMP objective	Notes / priority level if known
26. Assess the extent of use and impacts of exotic vegetation to stabilize beach/dune systems; provide recommendations/ guidelines on sensible removal of exotic vegetation from these ecosystems (cf. Leatherback Assessment project concept). Fund a scientifically-robust post graduate study in Mozambique. NB. a post-doc on dune stabilization is already underway in South Africa.	Signatory States (Mozambique, South Africa)	MOS7 Action Points, Outcomes, WIO sub-regional group discussion at IOSEA MOS7, MOS7 report	MOS7 report	Habitat Rehabilitation, Objective 1, 1.1 and 1.2	Casuarina project update pending
27. Extend genetics work on green, loggerhead and hawksbill turtles, which has been initiated but not yet completed	Signatory States (WIO)	MOS7 Action Points, Loggerhead assessment		Collaborative Research and Monitoring, Objective 3	
28. Provide partial support or help to leverage funding for a post-graduate study to investigate the hatching success and incubation temperature of leatherback rookeries in Mozambique. This research should be done in conjunction with sub-regional experts (Dr Ronel Nel/South Africa).	WIO sub-region, not specified, sub-regional experts (Dr Ronel Nel/South Africa).	Provisional list of project concepts resulting from the updated (2012) Leatherback Assessment	Leatherback assessment	Collaborative Research and Monitoring, Objective 3	

Priorities arising from the analysis of national reports for MOS7

About three-quarters of the Signatory States identified the conservation and management activities that they consider to be among the highest priorities for action.

The nine highest priorities are: (1) conducting targeted studies on marine turtles and their habitats; (2) establishing habitat protection and conservation measures; (3) establishing or strengthening education and information programmes; (4) capacity-building, training and partnerships; (5) reducing incidental capture and mortality; (6) identifying and documenting threats; (7) enhancing public participation; and (8) enhancing cooperation, information exchange mechanisms and (9) developing nesting beach management programmes.

Signatories also identified the following issues as those for which international cooperation was essential. These include cooperative research in several specialized areas, illegal fishing/enforcement in territorial waters, training/capacity building, oil spills, pollution and marine debris.

Priorities requiring international cooperation

Higher importance: cooperative research in several areas (e.g. identification of migration routes, habitat and genetics studies, tagging/satellite tracking and identification of turtle populations); illegal fishing in territorial waters; training/capacity building, enforcement / patrolling of territorial waters, oil spills, pollution and marine debris

Lower importance: development of gear technology, poaching/illegal trade in turtle products, hunting/harvest by neighbouring countries, alternative livelihood development

Priorities extracted from MOS7 report

WIO MTTF considered social, economic and cultural issues as a priority.

Bycatch was recognized as a high priority issue by WIO -MTTF

Priority projects resulting from leatherback and loggerhead assessments

Leatherback assessment

Project 3 (work in progress in South Africa): Coastal management practices e.g. dune stabilization through the use of Casuarina trees, potentially have a significant impact on turtle nesting habitat in the IOSEA region and so affect nesting and hatching production.

Through a post graduate research project with expert advice/support

- Conduct an online survey (e.g. survey monkey) to identify key drivers of impacts to beach/dune systems (e.g. Casuarinas, erosion, soft and hard armouring, light pollution) on nesting beaches across the IOSEA region.
- Use data from the IOSEA website, google earth and other spatial tools to map and quantify the extent of the impacts.
- Overlay these impacts with known nesting habitats•Identify priority areas for rehabilitation or other forms of mitigation.

Loggerhead assessment

Project 1: There is a lack of knowledge of hatchling production rates and hatchling and post-hatchling dispersal of loggerhead turtles from rookeries in the Indian Ocean. This should be

done for each of the management units, noting that the baseline data available differs across the management units. Determine (step 1) temporal and spatial patterns of clutch distribution (step 2) survivorship of eggs and hatchlings (step 3) socioeconomic opportunities/barriers to manage egg loss and if possible (step 4) use ocean modelling coupled with genetics to understand oceanic dispersal.

Project 3: There is a lack of knowledge on the vulnerability of loggerhead turtle nesting beaches in the IOSEA region to climate change. This should be done for each of the management units, noting that the baseline data available differs across the management units.

- Quantify sand temperature profiles from index beaches to better understand the variability of temperatures that eggs are exposed to
- Use beach height data, distribution maps and other spatial datasets to understand vulnerability of IOSEA stocks

Illegal Take and Trade of Marine Turtles in The IOSEA Region

Although a need to enhance and harmonise national legislation has been identified in certain countries, notably Malaysia and Japan (non-Signatory), the need to improve enforcement of *existing* legislation is even more acute – particularly in Indonesia, Kenya, Madagascar, Malaysia, Philippines, United Republic of Tanzania, Viet Nam and China (non-Signatory), and possibly many more countries where significant trade is known to occur.

The socio-economic drivers of illegal take and trade of marine turtles and derivatives in the IOSEA region need to be investigated more thoroughly and more targeted strategies developed to address issues of supply and demand – particularly in hotspots where important sources of turtles or trade routes have been identified, such as Indonesia, Madagascar, and China (Hainan province).

International cooperation to address illegal trade needs to be strengthened. ASEAN-WEN network might serve as a model for other sub-regions where similar mechanisms do not yet exist.