**Terms of Reference for Consultative workshops for the IOC/MAB  
Pre-Concept Note to the Climate Change Adaptation Fund**

Jakarta, Indonesia (Hybrid)  
15 - 16 December 2022

## Background

Coastal and island Biosphere Reserves are highly vulnerable to coastal hazards which will become more frequent and intense due to the adverse effects of climate change. Inundation from coastal hazards is set to worsen globally because of climate change, with the Intergovernmental Panel on Climate Change (IPCC) highlighting that coastal and low-lying regions will be impacted by more frequent and intense coastal hazards because of climate change. A 2015 UNESCO survey found that 84 percent of Biosphere Reserves considered natural hazards to be an important issue, and a follow-up survey in 2017 found that 94 percent of Biosphere Reserves are exposed to natural hazards. In fact, natural hazards and climate change have already caused significant damage to several UNESCO-designated sites (Marzeion and Lervermann, 2014[[1]](#footnote-1); Reimann et all., 2018[[2]](#footnote-2); UNESCO, IUCN (2022)[[3]](#footnote-3); Vousdoukas, et al., 2022[[4]](#footnote-4);

While most coastal hazards cannot be prevented, the risks and vulnerability associated with them can be reduced by implementing programmes that develop resilient communities and build preparedness capacity to these hazards. Preparedness for coastal hazards significantly reduces risk by empowering populations at risk to react readily and appropriately through the development of plans, methods, procedures and actions to be followed by officials and the general public in the event of a coastal hazard. Using a multi-hazard approach to coastal hazard preparedness enhances resilience and preparedness capacities by making populations more adaptable. It also better prepares communities for coastal hazards under future climate change scenarios, which are set to bring strong and more frequent hazards, as well as more multi-hazard events. In addition, impacts from coastal hazards can be mitigated by leveraging opportunities offered by nature-based solutions and ecosystem services, as well as the blue economy, to build community resilience to these hazards.

UNESCO Biosphere Reserves are sites that promote solutions reconciling the conservation of biodiversity with its sustainable use. They are learning areas for sustainable development under diverse ecological, social and economic contexts, impacting on the lives of more than 250 million people worldwide. These sites are unique in their juxtaposition of a mandate of protection and conservation of nature coupled with pursuit of sustainable development for populations, which often include both local inhabitants and seasonal visitors.

In response to the need to develop and establish preparedness and response mechanisms for Biosphere Reserves worldwide to coastal hazards, the Intergovernmental Oceanographic Commission of UNESCO (IOC/UNESCO) and Man and Biosphere programme (MAB) of UNESCO developed a Joint Initiative “An integrated approach to coastal hazards and climate change in UNESCO Biosphere Reserves: Saving lives, protecting biodiversity”.

This proposed initiative is based on a pilot Joint Initiative between the Tsunami Unit of IOC/UNESCO and MAB to develop an integrated approach to coastal hazard preparedness in the Savegre Biosphere Reserve, Costa Rica. Based on this pilot experience as well as upcoming Guidelines on Coastal Hazard Preparedness in Biosphere Reserves, UNESCO has developed internal expertise and reinforced its network of experts to inform international efforts to strengthen coastal hazard inundation preparedness in coastal and island Biosphere Reserves worldwide.

Based on this expertise, the IOC and MAB have begun developing a pre-concept note for replication of their Joint Initiative in select Biosphere Reserves worldwide, to be submitted to the Climate Change Adaptation Fund. Indonesia was selected as one of the countries to be included in the Joint Initiative to be submitted to the Climate Change Adaptation Funds.

Indonesia was selected as one of the countries to be included in the Joint Initiative to be submitted to the Climate Change Adaptation Funds. Based on the risk map, IOC/MAB has been pre-selected the pilot sites for Indonesia which include Siberut BR in West Sumatra, Blambangan BR in East Java and Bunaken-Tangkoko-Minasaha BR, North Sulawesi.

## Purpose

To build and finalize the IOC/MAB Joint Initiative Pre-Concept Note for the Climate Change Adaptation Fund, it is essential to hold consultation workshops at the national level with each project country to identify specific risks and challenges of each Biosphere Reserve and quantify the potential benefits of the project (including population at risk), for both the country and region as a whole.

This workshop will provide the opportunity to bring to the table key national stakeholders that will be involved in project implementation. These key stakeholder will have the opportunity to share insights, suggestions, and recommendations on all aspects of the proposed project, including the local context, project components, project implementation strategy and next steps. As such, this workshop will enable leveraging of local and national knowledge and tailoring of the IOC/MAB Joint Initiative approach to specific country and Biosphere Reserve contexts, needs and priorities.

## Workshop Objectives

There are two overarching objectives of the consultation workshop:

* To establish the local, national and regional context for the proposed project: Sites (vulnerable populations, coastal hazards, climate change impacts), relevant projects, and relevant national/regional priorities and policies.
  + *Associated deliverable: 1-2 pages document for each Biosphere Reserve site which outlines the findings relating to the above-mentioned topics, to be included in the pre-concept note. (Please note that a template will be providing which outlines main areas to report on). – hereafter “Deliverable 1”*
* To review and propose updates the project components (ranging from overarching objectives to activities) and implementation strategy to reflect needs, priorities and capacity of specific UNESCO Biosphere Reserve sites.
  + *Associated deliverable: Document of recommendations and suggestions for updates to the project components (ranging from overarching objectives to activities) and implementation strategy. – hereafter “Deliverable 2”*

## Logistics and format

This workshop will be held in hybrid format, with local/national stakeholders attending in person, and UNESCO Headquarters staff participation virtually. The workshop will be held:

|  |  |  |
| --- | --- | --- |
| Date | : | 15 – 16 December 2022 |
| Time | : | *Refer to agenda below* |
| Venue | : | Ayana Midplaza Jakarta  Jl. Jenderal Sudirman Blok 10-11, Jakarta, Indonesia  <https://g.page/ayanajakarta?share>  [www.ayana.com](http://www.ayana.com) |
| Online participation | : | *link to be provided upon confirmation* |

UNESCO Headquarters staff (from IOC and MAB) will provide the content of the workshop, presenting on key topics and remaining available throughout the workshop to answer questions and participate in discussions. UNESCO Headquarters staff will also support with notetaking and documentation of the workshop, within the constraints of virtual attendance.

## Participants

This workshop will bring together key stakeholders that would be involved in the project. Although participants in each country will differ, some of the main stakeholders to be included are:

* UNESCO Office Jakarta representatives
  + *Ardito Kodijat,* National Professional Officer for TIC Jakarta
  + *Adhe Lignita Wulandari,* Project Assistant for Water and Environmental Sciences
  + *Dinanti Erawati,* Administration Assistant for Science unit
* IOC/UNESCO HQ representatives:
  + *Bernardo Aliaga,* Head of the Tsunami Unit
  + *Julian Barbière,* Chief of Section for Marine Policy and Regional Coordination
  + *Kirsten Isensee,* Programme specialist for Ocean Science Section
  + *Celine Tiffay*, Programme and project assistant, Tsunami Unit
* Climate Change Adaptation Fund focal point
  + *Ms. Laksmi Dhewanthi,* Director General of Climate Change. Ministry of the Environment and Forestry, Republic of Indonesia
* Indonesian Ministry of Environment and Forestry
* Indonesian Meteorological, Climatological, and Geophysical Agency (BMKG)
* Indonesian National Disaster Management Agency (BNPB)
* Head of Siberut National Park
* Head of Meru Betiri National Park
* Head of Alas Purwo National Park
* Head of Bunaken National Park
* East Java Spatial Planning Agency Focal Point
* North Sulawesi Spatial Planning Agency Focal Point
* West Sumatra Spatial Planning Agency Focal Point
* Indonesian MAB National Committee
* Technical experts/ Academia

## Agenda

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| --- | --- | --- |
| Time | Activity | Presentor / facilitator |
| Thursday, 15 December 2022 (UTC+7) | | |
| PART 1: IntrODUCTIONS | | |
| 13:30 | Arrival of participants |  |
| 14:00 | Welcome words and Introductions | UNESCO Jakarta  Ardito Kodijat |
| 14:30 | Presentation on IOC/UNESCO, including context of Ocean Decade | IOC  Bernardo Aliaga |
| 14:45 | Presentation on UNESCO MAB programme | MAB  Adhe Lignita Wulandari |
| 15:00 | Presentation on the Climate Change Adaptation Fund | IOC  Celine Tiffay |
| 15:15 | Presentation on proposed IOC/MAB project: background, context and rationale. | IOC  Celine Tiffay |
| 15:35 | Q&A session | Facilitator: UNESCO Jakarta |
| 15:45 | BREAK |  |
| PART 2: WORKING SESSION: NEXT STEPS OF CONSULTATION PROCESS | | |
| 16:00 | Presentation on objectives of the workshop and next steps of the Adaptation Fund Pre-Concept Note and national/regional consultation process | IOC  Celine Tiffay |
| 16:15 | Q&A session | Facilitator: UNESCO Jakarta |
| 16:30 | Brief presentation of project results framework (from components to activities) | IOC  Celine Tiffay |
| 16:45 | Q&A session | Facilitator: UNESCO Jakarta |
| friday, 16 december 2022 (UTC+7) | | |
| PART 3: WORKING SESSION: CONTEXT OF UNESCO BIOSPHERE RESERVE SITES | | |
| 08:30 | Arrival of participants |  |
| 09:00 | Presentation on national Biosphere Reserves network | Indonesian MAB National Committee  Prof Purwanto |
| 09:15 | Presentation on key relevant national or regional priorities, policies, or projects related to Tsunami | Indonesian Meteorological, Climatological, and Geophysical Agency (BMKG)  Dr Daryono |
| 09:30 | National policy and program on Disaster Risk Reduction in Biosphere Reserve sites | Indonesia National Agency for Disaster Management (BNPB) Dr Raditya Jati/ Dr Udrekh |
| 09:45 | Risk Assessment in National Priority Tourism Area | Technical expert Dr Endra Gunawan |
| 10:00 | Presentation on Siberut Biosphere Reserve | West Sumatra Province Medi Iswandi |
| 10:15 | Presentation on Blambangan Biosphere Reserve | East Java Province  Mohammad Yasin |
| 10:30 | Presentation on Bunaken – Tangkoko - Minahasa Biosphere Reserve | North Sumatra Province  Jenny Karouw |
| 10:45 | BREAK |  |
| 11:00 | Plenary discussion about the context of UNESCO Biosphere Reserve national sites.  *Deliverable 1 to be drafted during this session.* | Facilitator: UNESCO Jakarta |
| 11:30 | LUNCH BREAK – FRIDAY PRAY |  |
| PART 3: WORKING SESSION: PROJECT RESULTS FRAMEWORK | | |
| 13:00 | Presentation of project results framework (from components to activities) – brief reminder | IOC  Celine Tiffay |
| 13:30 | Group ice-breaker exercise (if time allows) | Facilitator: UNESCO Jakarta |
| 13.45 | Group activity on project results framework  *Participants divided into two groups, each with similar types of stakeholders. Each group has 2-3 components (and associated outputs and activities). Groups discuss application of their components in the specific local/national context, identifying gaps and opportunities. – Each group designates a rapporteur.* | Facilitator: UNESCO Jakarta |
| 14:15 | Plenary discussion about project results framework, beginning with presentations by Group rapporteurs of their comments. This is followed by a general plenary discussion.  *Deliverable 2 to be drafted during this session, based on discussion (this is part 1 of Deliverable 2).* | Facilitator: UNESCO Jakarta |
| PART 3: WORKING SESSION: project IMPLEMENTATION STRATEGY | | |
| 14:45 | Presentation on the project implementation strategy  *Content includes draft stakeholder mapping, implementation approach, and implementation plan.* | IOC  Celine Tiffay |
| 15:00 | Plenary discussion on stakeholder mapping | Facilitator: UNESCO Jakarta |
| 15:30 | BREAK |  |
| 15:45 | Plenary discussion on implementation approach and implementation plan  *Deliverable 2 to be drafted during this session, based on discussion (this is part 2 of Deliverable 2).* | Facilitator: UNESCO Jakarta |
| PART 4: WORKING SESSION: NEXT STEPS OF CONSULTATION PROCESS | | |
| 16:15 | Finalize next steps of the Adaptation Fund Pre-Concept Note and national/regional consultation process | UNESCO Jakarta  IOC (Celine Tiffay) |
| 16:30 | Opportunity to finalize inputs to Deliverable 1 and Deliverable 2 | Facilitator: UNESCO Jakarta/ HQ |
| 17:00 | Closing of the workshop |  |

1. Marzeion, B. and Lervermann, A. (2014) ‘Loss of cultural world heritage and currently inhabited places to sea-level rise’, *Environmental Research Letters*, 9, 034001. [↑](#footnote-ref-1)
2. Reimann, L., Vafeidis, A.T., Brown, S. et al. (2018) ‘Mediterranean UNESCO World Heritage at risk from coastal flooding and erosion due to sea-level rise’, *Nat Commun*, 9, 4161. [↑](#footnote-ref-2)
3. UNESCO, IUCN (2022) *World Heritage Glaciers: Sentinels of climate change.* Paris: UNESCO; Gland: IUCN. [↑](#footnote-ref-3)
4. Vousdoukas, M.I., Clarke, J., Ranasinghe, R., Reimann, L., Khalaf, N., et al. (2022) ‘African heritage sites threatened as sea-level rise accelerates’, *Nature Climate Change*, 12, pp.256-262. [↑](#footnote-ref-4)