Wakatobi National Park information requirements for inclusion in CTMPAs Categories 3 or 4

| Part 1 | Part 1. Data Attributes in the CT Atlas and Core (Minimum) Data Requirements | | |
|--------|--|---|--|
| | Attributes | Response | |
| 1. | CT Atlas ID # | 1004600 | |
| 1.1 | Country* | Indonesia | |
| 1.2 | Latitude* | Point 1 (05 11'57" S) Point 2 (05 12'04" S) Point 3 (05 12'04" S) Point 4 (05 12'04" S) Point 5 (06 36'04" S) | |
| 1.3 | Longitude* | Point 1 (123 20'00" E) Point 2 (123 38'56" E) Point 3 (123 39'01" E) Point 4 (123 50'00" E) Point 5 (123 20'00" E.) | |
| 1.4 | Name* | Wakatobi National Park | |
| 1.5 | Designation* | National Park | |
| 1.6 | Legal/Formal Instrument | Marine Protected Area under Ministry of Forestry Decree, (<mark>Surat Keputusan</mark> menteri kehutanan Republic of Indonesia No. 7651/Kpts- II/2002 dated 19/08/2002) Please provide a copy of this decree | |
| 1.7 | Designation Type* | National | |
| 1.8 | Domain* | Marine-Terrestrial | |
| 1.9 | Status*4 | Designated | |

| Part 1 | Part 1. Data Attributes in the CT Atlas and Core (Minimum) Data Requirements | | |
|--------|--|---|--|
| | Attributes | Response | |
| 1.10 | Date Established* | 19 August 2002 | |
| 1.11 | Reported area (ha⁵)* | 1,390,000 ha Source (see attached document – in Bahasa): Rencana Pengelolaan Taman Nasional Wakatobi, Bab II Deskripsi Kawasan, page 7 | |
| 1.12 | Total marine area (ha⁵)* | 1,343,630 ha. (46,370 hectares land area) Clifton J (2011) The Wakatobi National Park – governance analysis. Pages 118-126 in PJS Jones, W Qiu and EM De Santo (Eds) Governing Marine Protected Areas: getting the balance right – Volume 2. Technical Report to Marine & Coastal Ecosystems Branch, UNEP, Nairobi. <u>http://www.mpag.info/mpag-final-technical-report-vol2.pdf</u> | |
| 1.13 | Management Plan ^b | Yes | |
| 1.14 | IUCN Management Category | II | |
| 1.15 | International Convention6 | UNESCO Man And Biosphere Reserve (2012) | |
| 1.16 | Administrative unit level- 1 | Administrative: Central government (centralized regime) through Ministry of Forestry under Directorate General Nature Conservation & Forest Protection by managed at field site level as Balai Taman Nasional Wakatobi (Wakatobi National Park Authority) Location: Southeast Sulawesi | |
| 1.17 | Zonation | Yes. SKDirjenPHKA149-IV-KK-2007 Sources (see attached documents-In Bahasa): Wakatobi Zonation Plan Book Wakatobi Zoning Map SKDirjenPHKA149-IV-KK-2007 | |
| 1.18 | No Take | Part | |
| 1.19 | Reported No Take Area (ha5) | <mark>43,930 ha</mark> | |

| Part 1 | Part 1. Data Attributes in the CT Atlas and Core (Minimum) Data Requirements | | |
|--------|--|--|--|
| | Attributes | Response | |
| 1.20 | Management Effectiveness Model | MPA SCORE CARD (MoF) and MPAME | |
| 1.21 | Management Effectiveness Rating | The management effectiveness of Wakatobi has not been evaluated using standard management effectiveness evaluation tool (E- KKP3K). The evaluation of Wakatobi using E-KKP3K tool will be conducted this year. However, in 2011, Wakatobi management effectiveness has been assessed using MPAME and MPA Score Card tools with results as follows: Level 4– MPAME tool MPA ScoreCard (Context – 81%); (Planning-79%);(Inputs-57%); (Process-48%); (Outputs – 45%); (Outcomes-63%) Sources (see attached excel documents): MPAME_Wakatobi_7 April 2011 on sheet: Hasil Akhir Kartu Skor ScoreCardWakatobi | |
| 1.22 | Source | MPAME Assessment 2011 and MPA ScoreCard 2011 | |
| 1.23 | Validated | Yes by Head of Wakatobi National Park (Mr. Wahju Rudianto) in 2011 Wakatobi National Park Authority Jln. Dayanu Ikhsanuddin 71 Bau-Bau, Sulawesi Tenggara Tel / Fax: +62402 2826326 | |
| 1.24 | Consent to display and share ⁷ | Yes | |
| 1.25 | Notes | | |

| | Attributes | Response |
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| 2.1. | Site forms a network (or an equivalent) | Wakatobi National Park has <mark>43,930</mark> ha total (core zone, marine protection zone, tourism zone) of fully no take area http://wakatobinationalpark.com |
| 2.2. | Site targets an identified regional priority area, habitat or species | Wakatobi (also known as Tukang Besi) was identified as a 3 rd order priority (out of 4 orders) site for marine conservation in Indonesia by Salm and Halim (1984) and a first order priority (out of 3 orders) site by Djohani (1989) (Huffard et al. 2012). Huffard et al. (2012) ranked Banda Sea as 2 nd priority (out of 12) for conservation based upon an emphasis on irreplaceability and representativeness. Within Banda Sea, Wakatobi is considered to be the highest priority site for marine conservation (Huffard et al. 2012). <u>http://www.coraltriangleinitiative.org/sites/default/files/resources/8_Geographic%20Priorities%20for%20Marine%20Bi odiversity%20Conservation%20In%20Indonesia.pdf</u> |
| 2.3. | Site adheres to at least two of the following ecological design criteria: | |
| 2.3.1 | Representation | "Irreplaceability and representativeness criteria strongly underscore the importance of marine biodiversity conservation efforts focusing on Papua, the Lesser Sundas, the Banda Sea, and Western Sumatra". Furthermore, Wakatobi is considered to be the highest priority (4 responses) for marine conservation in Banda Sea. (Huffard et al. 2012) http://www.coraltriangleinitiative.org/sites/default/files/resources/8_Geographic%20Priorities%20for%20Marine%20Biodiversity%20Conservation%20in%20Indonesia.pdf Wakatobi includes at least 396 coral species and 572 fish species (Rapid Ecological Assessment, 2003). Source: Rapid Ecological Assessment, 2003 http://www.reefbase.org/resource_center/publication/pub_21465.aspx |
| 2.3.2 | Replication | No take zones were designated in each main group of islands (Wangi-wangi, Kaledupa, Tomia and Binongko) and outer coral reef therefore providing replication. |

| | Attributes | Response |
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| | | At least 20% of critical habitats (Coral Reef, Mangrove, Seagrass) and 100% of 4 Fish Spawning Aggregation sites, 1 seabird nesting beach, 3 turtle nesting beaches were allocated as no take zones. |
| 2.3.3 | Resilience | Mass coral bleaching hit Wakatobi National Park more than 4 times since 1998. The last coral bleaching showed the resilience level of Wakatobi National Park was high. After 3 month from coral bleaching, the coral reef ecosystem was back to normal condition. Source (see attached document): Wakatobi coral bleaching 2011_FINAL_ENG This is in line with Bachtiar et al. (2011) who stated that coral reef resilience in Wakatobi is higher than most other regions in Indonesia. http://www.omicsonline.com/open-access/assessing-ecological-resilience-of-indonesian-coral-reefs-1410-5217-14- |
| | | 318.pdf "upwelling of relatively cool waters from the South, the arearelatively protected from bleaching" http://pdf.usaid.gov/pdf_docs/Pdacn783.pdf |
| 2.3.4 | Connectivity | Information on larval dispersal and climate change was not yet available but the following rules of thumb were used in Wakatobi zoning design revision: Size of no-take zones: minimum = 13 km2 / maximum = 365 km2 Distance between no-take zones: minimum = 10 km / maximum = 20 km 30% of coral reefs (fringing, barrier, atoll and patch) 40% of mangrove forests 20% of seagrass beds 100% of Fish Spawning Aggregation sites 100% of turtle nesting sites 100% of seabird nesting sites |

| | Attributes | Response |
|-------|--------------------------|--|
| | | Source: TNC (The Nature Conservancy), WWF (World Wildlife Fund), CI (Conservation International) and WCS (Wildlife Conservation Society). 2008. Marine protected area networks in the Coral Triangle: development and lessons. TNC, WWF, CI, WCS and the United States Agency for International Development, Cebu City, Philippines. 106 p. http://pdf.usaid.gov/pdf_docs/PNADN987.pdf |
| 2.3.5 | Critical areas protected | "Exceptionally high abundance of oceanic dolphin and whale species including Sperm whales occurs in Wakatobi"; "Olive Ridley and Green turtles, especially those from Eastern Indonesia, find important nesting, foraging, and migratory grounds in Wakatobi"; "Wakatobi also host a number of important sea snake nesting colonies" Wakatobi is considered to be the highest priority for marine conservation in Banda Sea. Huffard, C.L., M.V. Erdmann, T.R.P. Gunawan (Eds) (2012). Geographic Priorities for Marine Biodiversity Conservation in Indonesia. Ministry of Marine Affairs and Fisheries and Marine Protected Areas Governance Program. Jakarta-Indonesia. 105 pp http://www.coraltriangleinitiative.org/sites/default/files/resources/8_Geographic%20Priorities%20for%20Marine%20B iodiversity%20Conservation%20In%20Indonesia.pdf 8 key critical habitats were identified in Wakatobi as follows: Coral Reefs (Barrier Reefs; Fringing Reefs; Patch Reefs; Atoll Reefs) Sea bird nesting beaches Turtle nesting beaches Mangrove Seagrass Cetacean include migratory corridors Fish Space that support Economic of Fisheries http://wakatobinationalpark.com/statik/potensikawasan/ |

| | Attributes | Response |
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| 2.4 | Site achieves a threshold level of management effectiveness | |
| 2.4.1 | Formal or legal basis for establishment | <mark>Surat Keputusan</mark> <mark>menteri kehutanan</mark> Republic of Indonesia No. 7651/Kpts-II/2002 dated 19/08/2002 |
| 2.4.2 | Management body established and functioning | The management body (Wakatobi Marine National Park Authority) has been fully functioning since it was established in 1997 by the Minister of Forestry. It has legal and judicial authorization to manage the Park in collaboration with the Southeast Sulawesi Provincial Government and the Wakatobi District Government. In managing the park, the management body is led by the Head of Wakatobi National Park that supported by 3 field section heads (in Wangi Wangi, Kaledupa and Tomia), 3 outreach staffs, and 40 park rangers. The management body has three functions, which are: conservation, patrolling, and socialization (Soedjak, 2012). |
| 2.4.3 | Management and/or zoning plan approved and implemented | Wakatobi Management Plan Revision was designed using CAP (Conservation Action Plan) and using 5S criteria (System, Stress, Sources of Stress, Strategy & Success). Management objectives follows the SMART rule (Specific, Measurable, Achievable, Realistic and Time Bound). The document developed for short term, middle and long term work plan and follows as reference to develop yearly work plan for budget planning purposes (RPTN attached). The management plan was approved through Directorate General Nature Conservation & Forest Protection decree: SK.149/IV-KK/2007. Source (see attached documents-in Bahasa): Zoning plan: SKDirjenPHKA149-IV-KK-2007. Management plan: RPTN |

| | Attributes | Response |
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| 2.4.4 | Resource and socio- economic baseline assessment completed | Wakatobi includes at least 396 coral species and 572 fish species (Rapid Ecological Assesment, 2003). Source: Rapid Ecological Assessment, 2003 <u>http://www.reefbase.org/resource_center/publication/pub_21465.aspx</u> |
| | | Socio-economic baseline study in 2007 showed that about 41% of households in three assessed locations (Waha, Mola Selatan and Wandoka) are categorized as poor households, which 31% of them are fishers households who earned less than \$50 (< Rp.500.000)/month. Their economic condition is determined and influenced by many factors, among them are: weather and climate conditions, low capacity and capital, as well as unenforced regulations (Hidayati et al, 2007). Source (attached document): • Socioeconomic Baseline_2007 |
| 2.4.5 | Site conducts regular biophysical and socioeconomic monitoring and analysis of results | Reef Heath conducted every 2 year. The reef health monitoring report for 2009 – 2011 periods concluded that the reef health in no take zone is higher than in utilization zone. Additionally, the report also stated that Wakatobi ecosystem is balanced which indicated by the sighted number of Crown of Thorns Starfish (COT) was lower than Sea Turtles (Sahri et al, 2012, p. 40). Coral cover. Hard coral covers during 2009 – 2011 in all sites and zones showed fluctuate trends where in most of the monitored sites had a slightly decreased in 2010 and then increased in the following years as shown in graph a (Sahri et al, 2012, p. 13). |









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| | | pressure on these species in WNP. Numbers of L. bohar are higher with between 200 and 400 individuals seen regularly (reefresilience.org). Source: <u>http://www.reefresilience.org/Toolkit_FSA/F8_Wakatobi.html</u> |
| | | Resources use monitoring implemented every month for 5 days called sortie. Data showed, after zoning revision was implemented, local fisherman compliance operated in no take zone level was high than before zoning revision (TNC, 2012) |
| | | TNC, 2012. Marine Resource Use in Wakatobi National Park, Sulawesi, Indonesia (2006-2009) See (attached): |
| | | Resource Use Monitorings_Wakatobi (2006-2009) |
| | | Mangrove monitoring survey in 2008 identified 17 Mangrove species in Wanci and Kaledupa Islands. It also revealed indications of mangrove logging in the monitored sites. |
| | | Report Monitoring Mangrove Pada Kawasan Taman Nasional Wakatobi kabupaten Wakatobi, 2008 http://wakatobinationalpark.com/arsipview/4/files_default/ |
| | | Looking at above monitoring results, it is safe to conclude that the Wakatobi management authority has successfully attain its second management objective which is to maintain biophysical condition within no take zone, and utilization zone. |
| 2.4.6 | Site conducts Information, Education, Communication (IEC), awareness programs | Park Authority has annual outreach program called Conservation Cadre. In this program, local communities especially the youths are trained and improved their awareness regarding conservation issues and park management and then organized as supporting group in any conservation actions within park area. Local curriculum for elementary to highschools which containing marine and fisheries issues that relevant with park conservation targets has develop and implemented in regular basis at schools within park area. Awareness program are delivered too through regular meetings and capacity building to community group forums in |

| | Attributes | Response |
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| | | each island, fishers groups and indigenous leaders. Supported by NGOs, Park authority has outreach program to fishers communities beyond park area especially to the district area who the fishers mostly come to fishing in utilization zone in Wakatobi NP. Public media such as local television channel and newspapers are involved too as medium to disseminate the park management issues. |
| | | "The communication campaign for Wakatobi occurs at the village level (meetings every month), at the sub-district level (3 times per month) and at the district level (6 times per month). Additionally, media messages are distributed through cable TV to support environmental issues, in general. Although challenging, through the communication campaign, the local communities in Wakatobi have become more experienced and knowledgeable about the benefits of MPAs." <u>http://www.reefresilience.org/Toolkit_Coral/Case_Studies/Indonesia_Wakatobi.html</u> |
| | | "There is a giant leaping (63% increase) of respondents' awareness on NTAs in Wakatobi National Park"from 2005, 2007 to 2009-2010. Widodo H, T Soekirman, A Halim (2010) Monitoring stakeholder perceptions to improve MPA management effectiveness in Indonesia – Round 3: Final Progress Report (1 October 2008-30 September 2010). The Nature Conservancy. <u>ftp://docs.lib.noaa.gov/pub/data.nodc/coris/library/NOAA/other/NA08NOS4630335_TNC-FinalProduct.pdf</u> |
| 2.4.7 | Site conducts effective | "The surveillance program of Wakatobi includes three components: |
| | enforcement | Surveillance: Wakatobi National Park rangers, local police, local community, local district fisheries and Wakatobi Marine & Fisheries Agency perform surveillance 10 days/month, using Floating Ranger Stations (FRS) around Wakatobi. Incidental Patrol: Wakatobi National Park rangers and police perform incidental patrols at least twice a month. Integrated Patrol: Integrated patrols by Wakatobi National Park rangers, Indonesian Navy, police, and the Wakatobi Marine & Fisheries Agency occur at least 6 days a month." <u>http://www.reefresilience.org/Toolkit_Coral/Case_Studies/Indonesia_Wakatobi.html</u> |
| | | Wakatobi developed a set series of enforcement, regular patrol, incidental patrol and legal follow. Regular patrol conducted at least 5 days a month, incidental patrol conducted if any inputs from local community members, legal |

| Attributes | Response |
|------------|---|
| | follow conducted if any legal prosecution. During 2003 – 2008 in Wakatobi there were 200 individuals under various categories offences which vary from coral mining, fishing in no take area, outsider fishers fishing without permit from District Fisheries Agency, bomb and cyanide fishing as documented in Clifton, 2013. Various penalties are implemented from expelled from park area after write precaution letter (zoning violators) to sentenced to prison for hard violators (bomb fishers) as reported in Matrix of Safety Disturbance Condition. |
| | Some villages within park, under their own customary and local regulations, conduct surveillance activities which recognized by park authority. |

| | Attributes | Response |
|---------|--|---|
| | | <u>http://www.sciencedirect.com/science/article/pii/S0308597X12002564</u> Matrix of Safety Disturbance Condition 2002 - 2008, Wakatobi National Park – In Bahasa <u>http://wakatobinationalpark.com/arsipview/3/files_default/</u> |
| 2.4.8 | Multi-stakeholder involvement and participation in management | Locally no take zone managed by local community was established & distributed in Wanci, Kaledupa, Tomia and Binongko. Those area located in Traditional used zone in formal zoning. Local community agreed, those area give the significant impact to reduce time externalty effect. Now, people can catch the fish not so far from the village Collaborative management scheme was implemented and conducted during zoning revision process and management plan revision process Head of Wakatobi District agreed to support Wakatobi National Park Management and district agencies have some programs to keep the biodiversity status in Wakatobi. To support surveillance in park area, Center of Marine Technology Engineering under Ministry of Marine and Fisheries Affair establishing surveillance radar in Wakatobi. Local and International NGOs, under district goverment coordination, are involved in community empowerment especially in improvement on community livelihood. Example of stakeholder engagement in the park management is The Kaledupa-based Darwin Initiative project plans to establish new village-based institutions (termed Village Fishers Forums) involving all fishermen and public representatives drawn from existing village institutions as documented in Clifton, 2013. http://www.mpag.info/mpag-final-technical-report-vol2.pdf Source: Clifton, J 2013. Refocusing conservation through a cultural lens: Improving governance in the Wakatobi National Park, Indonesia. Marine Policy 41 (2013) 80–86. http://www.sciencedirect.com/science/article/pii/S0308597X12002564 |
| 2.4.9. | Increased livelihood opportunities | |
| 2.4.10. | Research and development | Applying scientific knowledge to inform decision making process in the management of Wakatobi has been practiced since 1990s. It was merely consequences of NGOs presence that provides expertise, resources and data to the park authority as documented in Clifton, 2013. |

| | Attributes | Response | |
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| Source: Clifton, J 2013. Refocusing conservation throu Indonesia. Marine Policy 41 (2013) 80–86. <u>http://www.sciencedirect.com/science/article/pii</u> | | Source: Clifton, J 2013. Refocusing conservation through a cultural lens: Improving governance in the Wakatobi National Park, Indonesia. Marine Policy 41 (2013) 80–86. <u>http://www.sciencedirect.com/science/article/pii/S0308597X12002564</u> | |

| Part 3. Nominating Authority | | | | | |
|------------------------------|---------------------|---------------------------------------|---|--|--|
| | Attributes | Explanatory notes | Endorsement | | |
| 3.1 | Endorsement of CTI | Please provide name, signature and | Ir. Agus Dermawan, M.Si | | |
| | Country Focal Point | date as well as name of organization, | Chair of CTI MPA Working Group for Indonesia | | |
| | | full address and contact information | Director for Marine and Aquatic Resources Conservation | | |
| | | | Directorate General of Marine, Coasts, and Small Islands | | |
| | | | Ministry of Marine Affairs and Fisheries, Republic of Indonesia | | |
| | | | Mina Bahari 3, 10th Floor. | | |
| | | | Jl. Medan Merdeka Timur No. 16 Jakarta Pusat | | |
| | | | Tel. +6221 - 3519070, EXT. 6104, Fax (+6221) 3522045 | | |
| | | | Email: <u>kkji@kkp.go.id</u> ; <u>seskkji@yahoo.com</u> | | |

¹ This form is developed to assist countries in nominating their CTMPAS sites in response to the criteria set out in the CTMPAS Framework and Action Plan as explained in Annex 3, page 63 in the CTMPAS Framework document.

¹Core (minimum) attributes required for an MPA to be included as a recognized CTMPAS site (Category 1 or higher).

¹ This form is intended to guide the countries in submitting their information. Not every site or country will be able to fill in all the categories of information but if information is lacking, a simple assessment, summary or explanation will help guide the CTMPAS Advisory Committee.