

Please fill in the form in the grey spaces, by following the instructions in italic.

Requesting country:	Benin, Cameroon, Cote d'Ivoire, Gambia, Guinea, Senegal, Sierra Leone, Togo
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Request title:	West African coastal classification, hazard management and standardized communication scheme with the Coastal Hazard Wheel
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Contact information:

{Please fill in the table below with the requested information. The request proponent is the organization that the request originates from, if different from the National Designated Entity (NDE).}

	National Designated Entity	Request Applicant
Organization:	<p>NDE Benin : Raphiou Adissa Aminou, Aminou_raphiou@yahoo.fr</p> <p>NDE Cote d'Ivoire : Philippe Kumassi Kouadio, kumasphil@gmail.com</p> <p>NDE Gambia: Lamin E. Jatta, laminj@ymail.com laminj781@gmail.com</p> <p>NDE Guinea : Mamady Kobele Keita, kobele@gmail.com</p> <p>NDE Senegal : Issakha Youm, iyoum2@yahoo.fr</p> <p>NDE Sierra Leone: Abdul Salim, abdul_salim007@yahoo.co.uk</p> <p>NDE Togo : Mery Yaou, ymary69@yahoo.fr</p> <p>NDE Cameroon: Mr. Forghab Patrick Mbomba forghabp@yahoo.com</p>	<p>West African Coastal Observation Mission (WACOM)</p> <p>Tel: Office: +221 338258066/ GSM: +221776584926</p> <p>Fax: +221 338258168</p> <p>sall@cse.sn sall_moussa@hotmail.com</p> <p>WACOM, Centre de Suivi Ecologique, Rue Leon Gontran Damas, BP 15 532, Fann Residence, Dakar, Senegal</p>

Technology Needs Assessment (TNA):

{Select one of the three boxes below:}

- The requesting country has conducted a TNA in (please insert date of TNA completion)
- The requesting country is currently conducting a TNA
- The requesting country has never conducted a TNA

{If the requesting country has completed a TNA, please indicate what climate technology priority this request directly relates to. Please indicate reference in TNA/TAP/Project Ideas.}

CTCN Request Incubator Programme:

{Please indicate if this request was developed with support from the Request Incubator Programme:}

- Yes
 No

Geographical focus:

{Select below the most relevant geographical level for this request:}

- Community-based
 Sub-national
 National
 Multi-country

{If the request is related to the sub-national or multi-country level, please indicate here the areas concerned (provinces, states, countries, regions, etc.)}

The geographical focus is regional, covering the member countries of the West African coastal coordination mechanism - the West African Coastal Observation Mission (WACOM) and Cameroon. The 11 member countries are Mauritania, Senegal, Gambia, Guinea-Bissau, Guinea, Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Togo and Benin,

The request shall also cover Cameroon in Central Africa Sub Region with a coastline of about 401km.

Theme:

{Select below the most relevant theme(s) for this request:}

- Adaptation to climate change
 Mitigation to climate change
 Combination of adaptation and mitigation to climate change

Sectors:

{Please indicate here the main sectors related to the request. e.g. energy, industry, transport, waste, agriculture/fisheries, forestry, water, ecosystem/biodiversity, coastal zones, health, education, infrastructure/human settlement, tourism, businesses, early warning/disaster reduction, institutional design and mandates, cross-sectorial}

The main sector for the request is coastal zones, with broader association to all socio-economic activities and issues taking place in the coastal zone including tourism, ecosystem/biodiversity, pollution, infrastructure, mining, agriculture, fishing, industries, etc.

Problem statement (up to one page):

{Please describe here the difficulties and specific gaps of the country in relation to climate change, for which the country is seeking support from the CTCN. Please only provide information directly relevant to this request, and that justifies the need for CTCN technical assistance.}

The coastal areas of the West African region face some major challenges in adapting to the changing climatic conditions. The coastal zone hosts a large part of the region's economic activities and changing

coastal dynamics are already threatening societal interests. The coastal challenges (sea level rise, floods, erosion, landslides, disruption and degradation of ecosystems, intrusion of saline water, sea surface temperature rise, heavy storms, disappearance of islands, waste management, polluted beaches, increased scarcity of fresh water, etc.), have been noted at a number of Pan-African Ministerial conferences and action has recently been taken to develop a closer regional collaboration with the establishment of the regional coastal coordination mechanism, the "West African Coastal Observation Mission (WACOM)". Currently, 11 West African countries are part of the mechanism, including Mauritania, Senegal, Gambia, Guinea-Bissau, Guinea, Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Togo and Benin. Cameroon in Central Africa Sub Region is also concerned with this request.

The WACOM aims to coordinate and implement regional coastal hazard management activities to ensure a sustainable coastal development and timely adaptation to climate change. Yet, the challenges to WACOM are daunting as the West African coastal zone hosts 31% of the regions' total population and more than 50% of the urban population. Furthermore, the coastal fringe accounts for approximately 56% of the GDP of the West African coastal states.

A large regional study completed in 2011 by IUCN (on behalf of West African Economic and Monetary Union) has provided the West African countries with a good foundation for regional data management and a scientific knowledge base. Together with the formation of WACOM, this has sowed the seeds for a regional coastal systems approach to climate change adaptation that could potentially function as an example for other world regions. The activities are still in the early phase, however, and large challenges remain in broadening out the coordination activities, identifying relevant coastal management measures, mobilizing financial resources and standardizing cross-country communication.

The Coastal Hazard Wheel system has been identified by WACOM as a very useful approach for taking the regional activities forward as it offers a complete package for standardized coastal hazard management and communication at national and regional level. The system will allow for the implementation of a broader regional multi-hazard-assessment, identification of relevant hazard management measures and standardized information exchange between national and regional stakeholders, international institutions and the general public. The Coastal Hazard Wheel system will complete the West African coastal master plan, which identifies the different sectors and challenges, to optimize the recommendations. The WACOM would therefore like to request technical assistance from the CTCN for the establishment of a regional coastal classification, hazard management and standardized communication scheme with the Coastal Hazard Wheel, hereunder an initial classification of the West African coastline.

Past and ongoing efforts (*up to half a page*):

{Please describe here past and on-going processes, projects and initiatives implemented in the country to tackle the difficulties and gaps explained above. Explain why CTCN technical assistance is needed to complement these efforts, and how the assistance can link or build on this previous work.}

The regional effort to tackle coastal hazards and coastal climate change adaptation has been underway for more than a decade. The decision to carry out the regional coastal study and develop a coastal master plan was taken by the West African Economic and Monetary Union (UEMOA) as the first stage of the Regional Programme to Combat Coastal Erosion, subject of Regulation 02/2007/CM/UEMOA adopted in 2007. The regional study and master plan was carried out by the IUCN under responsibility of the Marine and Coastal Programme for Central and Western Africa.

The regional coastal study and master plan was implemented during the period 2009-2011. The study covered the 11 West African countries Mauritania, Senegal, Gambia, Guinea-Bissau, Guinea, Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Togo and Benin and the outcomes were presented at the Conference of Ministers from the involved countries in Dakar in May 2011.

In addition, Cameroon has elaborated two important documents, namely; “the national action plan for the management of marine and coastal areas”, and “the national strategy for the sustainable management of mangroves and coastal ecosystems”. Other projects implemented include the “Project for the rehabilitation and participatory management of mangroves and watersheds in the Douala/Edéa wildlife Reserve (2010-2013)”. Studies have been carried out as well. “Mapping and valuation of ecosystems and economic activities along the coast of Cameroon: implications of future sea level rise, 2009” and “Vulnerability to climate change of mangroves: assessment from Cameroon, Central Africa, 2012”.

The main outcome of the ministerial conference was the establishment of the West African Coastal Observation Mission (WACOM). The WACOM aims to facilitate regional coastal coordination and management and enable dissemination of quality information to existing consultative and decision-making bodies, hereunder Territories and Local authorities, Governments, WAEMU and ECOWAS Commission, Convention of Abidjan, Development Partners and the Secretariats of Guinea and Canary Current. The WACOM has been operational since 2013 and the coordination unit is hosted by the Centre for Ecological Monitoring in Dakar, Senegal. The activities until now include coordination of regional coastal data collection, monitoring of management activities and training and knowledge exchange for regional coastal stakeholders.

At this stage, the WACOM has established the operational capacity necessary to coordinate larger regional climate change adaptation activities but still needs to establish a greater substantial framework for coordination of coastal management activities and information exchange.

Assistance requested (up to one page):

{Please describe here the scope and nature of the technical assistance requested from the CTCN and how this could help address the problem stated above and add value vis-à-vis the past and on-going efforts. Please note that the CTCN facilitates technical assistance and is not a project financing mechanism.}

The WACOM and its national coastal focal points would like to request technical assistance from the CTCN for the establishment of a regional coastal classification, hazard management and standardized communication scheme with the Coastal Hazard Wheel, covering the interested member countries and Cameroon. The requested technical assistance include a detailed classification of the West African coastline that could function as a universal classification base for the practical use of the Coastal Hazard Wheel by all coastal stakeholders in the participating countries.

The technical assistance requested therefore cover a regional coastal classification carried out in collaboration with the national coastal focal points, capacity building activities for national coastal focal points on the Coastal Hazard Wheel, prioritization of relevant hazard management measures and support to national follow-up activities. If possible, WACOM would be interested in having the currently available socio-economic data included in the scheme and also allow for a future integration of the project in the global Coastal Hazard Wheel data activities.

In addition to these technical core activities, WACOM would be very interested in assistance from CTCN in liaising with international financial institutions and donor countries for subsequent implementation and scale up of management measures identified with the Coastal Hazard Wheel scheme.

Expected benefits (up to half a page):

{Please outline here the medium and long-term impacts that will result from the CTCN technical assistance, including how the assistance will contribute to mitigate and/or adapt to climate change.}

The WACOM foresees great benefits from the establishment of a regional coastal management and communication scheme with the Coastal Hazard Wheel, as it provides a universal system for managing all key coastal hazards and for standardized communication of coastal information between a broad group of stakeholders. This should provide a robust base for regional coastal collaboration and facilitate prioritization of relevant management measures. Furthermore, it will allow WACOM to better communicate adaptation needs, options and challenges to international financial institutions and the global climate community.

In the short term, the scheme will allow WACOM to gear up its regional coastal coordination and management efforts and improve the decision-base for national and regional adaptation activities. In addition to this, it will allow for a better long-term planning and facilitate involvement of a broader group of stakeholders in the coastal management activities. The possibilities for linking up with the global Coastal Hazard Wheel data activities will allow for continued improvements in the data system and facilitate data exchange with scientists, international organizations and the wider global community.

Post-technical assistance plans (up to half a page):

{Please describe here how the results of the CTCN technical assistance will be concretely used by the applicant and national stakeholders, to pursue their efforts of resolving the problems stated above after the completion of the CTCN intervention (list specific follow-up actions that will be undertaken).}

The regional Coastal Hazard Wheel scheme will be used by the WACOM coordination unit, national coastal focal points and a broader group of coastal stakeholders to facilitate regional coordination and communication, continuous identification of relevant management measures, development and implementation of national and regional hazard management priorities. It will thereby be a keystone for future regional coastal management activities, and national and regional information exchange. Furthermore, it will allow WACOM and Cameroon to take continuous part in the global Coastal Hazard Wheel data activities and possible continuous data refinement.

Specific follow up-activities include continuous dialogue between the WACOM coordination unit and the national coastal focal points on the use of the scheme and implementation of management activities. Also, continuous dialogue between the global Coastal Hazard Wheel platform, the WACOM coordination unit and the national coastal focal points will enable continuous transfer of related knowhow to regional coastal stakeholders.

Key stakeholders:

{Please list in the table below the main stakeholders who will be involved in the implementation of the requested CTCN technical assistance, and what their role will be in supporting the assistance (for example, government agencies and ministries, academic institutions and universities, private sector, community organizations, civil society, etc.). Please indicate what organization(s) will be the main/lead counterpart(s) of CTCN experts at national level, in addition to the NDE.}

Stakeholder	Role to support the implementation of the assistance
Ministries in charge of environment in the 11	The ministries responsible for the environment are the main focal points of the WAEMU under the program

WACOM countries and Cameroon	against coastal erosion and WACOM. They are responsible for the validation and recognition of the results of WACOM in decision-making mechanisms in the countries. They are represented in the WACOM governance bodies within the regional steering committee
Universities and research centers	Universities and research centers working in the coastal area are heavily involved, since the development of the master plan, in the documentation of risk areas and the development of case studies. In addition, the WACOM Regional Scientific Committee is mainly composed by this category of actors.
Meteorological institutions The National Climate Change Observatory for Cameroon (ONACC)	Meteorological institutions play a vital role in collecting and making available information on ocean conditions ONACC is responsible for the monitoring and evaluation of the socioeconomic and environmental impacts of climate change and to propose preventive, mitigation and/or adaptation measures to the adverse effects and risks associated with these changes.
Port authorities	Port authorities are key institutions for collecting and managing data on sea level by tide gauge
Local authorities/Local Councils	Local authorities are responsible for risk management in their towns and are essential partners in the knowledge of risky sites and need to be protected
NGO and private sector	Non-Governmental Organizations and the private sector can initiate or be involved in coastal risk management through e.g. strengthening capacities of actors

Alignment with national priorities (up to half a page):

{Please demonstrate here that the technical assistance requested is consistent with documented national priorities (examples of relevant national priorities include: national development plans, poverty reduction plans, technology needs assessments (TNAs), LEDS, NAMAs, TAPs, NAPs, sectorial strategies and plans, etc.). For each document mentioned, please indicate where the priorities specifically relevant to this request can be found (chapter, page number, etc.).}

With climate change on a global scale, coastal risks are increasingly considered in sustainable development of the West African countries programs. Increased flooding and intensity of coastal erosion linked to West Africa storm events, justifies the awareness of public authorities

In Benin, the growth strategy for poverty reduction (2011-2015) addresses the management of natural disasters and risks under Section 8.6 on page 153 and is based on civil protection, climate risk management and management risks related to coastal erosion.

In Cote d'Ivoire, the National Development Plan (2012-2015), in its fourth volume (result 4, page 184), identifies coastal development of an emergency plan, the establishment of the vulnerability map for the coastal emergency response plan against oil, and promoting the environment and sustainable development as a priority.

In Gambia, the Joint Assistance Strategy (2012-2015), in Annex 6 page 75, cites the National Action Plan for Adaptation to Climate Change (NAPA), which aims, among others, to understand the main features of climatic hazards (floods, drought, saline intrusion) and the mechanisms of adaptation to climate risk and climate change

In Guinea, the five-year plan for socio-economic development (2011-2015) deals with sustainable development in chapter 7, page 70 discusses issues related to environmental protection.

In Bissau Guinea, the country strategy paper and national indicative program (2008-2013), in Annex 4 on page 71 of the environmental profile of the country, proposes to create a structure to manage disasters (natural and anthropogenic) and support the establishment of an early warning system.

In Mauritania, the strategic response plan (2014) incorporated the priority measures on page 11 of HNO such as the identification of areas affected by food insecurity and malnutrition, floods, and that sheltering the refugees, through cross-sectoral analysis of vulnerabilities.

In Senegal, the emerging plan (2014) for 2030 calls to prevent and reduce major disaster risks through the development of contingency plans at national and regional level, promoting a culture of prevention and management of disaster risks, the control of major industrial accidents, setting up an early warning system for natural hazards and improving the safety of transport of hazardous materials. This is especially declined in chap 3.2.7 prevention and management of risks and disasters at page 101.

In Togo, the full Strategy Paper Poverty Reduction (2009-2015) addresses in subchapter 2.6 on page 75, the effective and efficient management of natural disasters. Several guidelines are developed there as the development of the national strategy to reduce disaster risk, the establishment of a multi-hazard early warning system and several studies as risk mapping

In Cameroon, the National Climate change adaptation plan (PNACC, 2016-2020) considers the coastal zone as one of the priority ecosystems highly vulnerable to the impacts of climate change (cf. pages 67 and 89).

Development of the request (*up to half a page*):

{Please explain here how the request was developed at the national level and the process used by the NDE to approve the request before submitting it (who initiated the process, who were the stakeholders involved and what were their roles, and describe any consultations or other meetings that took place to develop and select this request, etc.)}

The process for submitting the request has been initiated by WACOM after substantial consultations with the inventor of the Coastal Hazard Wheel on whether it would be possible to apply the system for the West African region and Cameroon in Central Africa Sub Region. The request has subsequently been developed by WACOM in consultation with the national coastal focal points and NDE of Cameroon.

Expected timeframe:

{Please propose here a duration period for the assistance requested.}

It is requested that the activities commence in mid-2016 and are completed by end-2017.

Background documents:

{Please list here relevant documents that will help the CTCN understand the context of the request and national priorities. For each document, provide weblinks if available, to attach to the submission form while submitting the request. Please note that all documents listed/provided should be mentioned in this request in the relevant question(s), and that their linkages with the request should be clearly indicated.}

The complete collection of documents from the regional coastal study by IUCN can be found on this link:

https://www.iucn.org/fr/propos/union/secretariat/bureaux/paco/programmes/programme_marin_et_cotie