**Work Order 2**

**Mainstreaming Climate Change in the Fishery Sector in the Androy Region, southern Madagascar**

**Context and Justification**

The present Work Order is based on a request from a PhD student, Mr. Paubert Mahatante, who is attached to the Institute for Fisheries and Marine Sciences of the University of Toliara, Madagascar. Mr. Mahatante is conducting a PhD study on the development of the fisheries sector in the most southern region of Madagascar. This study includes the assessment of the effects of climate change on the sector (fishery stocks, higher risks for local fishermen due to frequent cyclones, etc...) in the concerned region. To improve the quality and development value of his work, Mr. Mahatante seeks expert advice from a specialist in fisheries/marine environment with excellent knowledge on the interactions between climate change and fisheries, in particular for the development of an appropriate study approach and methodology.

In view of optimising the presence of a fishery/climate change expert in the area, it was discussed and found appropriate that the TA would additionally include some CC mainstreaming and capacity building activities, thereby addressing the other key stakeholders of the fisheries sector in the region. The envisaged CC mainstreaming and capacity building activities will allow the sector to take proper account of climate change issues when developing new strategies and action plans. In concrete terms, a 1 day workshop will be organised at the Institute for Fisheries and Marine Sciences of the University of Toliara. This workshop will target concerned academic staff, researchers and students. Another 1 day workshop will be organised in *Ambovombe*, the regional capital of the *Androy* Region and address other relevant stakeholders, such as local authorities, officials of the Ministry of Planning, officials of the Ministry of Fishery, representatives of Fishery Associations, representatives of Fishery businesses, representatives from local organisations and NGOs, and others to be identified.

The Technical Assistance to be provided under the present Work Order is directly in line with 3 of the GCCA priorities: mainstreaming, adaptation and disaster risk reduction.

As for the eligibility of Madagascar, the country is in the top 10 list of countries being most exposed and most vulnerable to climate change. Adequate CC mainstreaming and adaptation are therefore crucial for the further sustainable development of the country. Further, according to Madagascar’s National Action Plan for Adaptation, the target area (the southern Region of *Androy*) is one of the country’s regions most vulnerable to CC. The Region of *Androy* is a semi-arid zone and is regularly affected by droughts, causing periods of famine and temporary migration of the inhabitants to the North. Poverty levels in *Androy* are higher than in any other region of the country. The difficult climate conditions constrain agricultural and livestock development. On the other hand, the south is extremely rich in fishery resources thanks to a local phenomenon of “upwelling waters”. At present, these fishery resources are being under-utilised; their valorisation under a sustainable management regime could significantly contribute to food security in the area.

It is expected that a sustainable development of the fishery sector in the target area would benefit, directly or indirectly, most inhabitants of the region, i.e. 600 000 people.

**Description of the Assignment**

**Objectives:**

General objective: To contribute to the development of the fishery sector in the southern region of *Androy*, Madagascar.

Specific objectives:

* To inform fishery stakeholders (University of Toliara, regional government officials, fishermen associations, development practitioners active in the fishery sector) on the effects of climate change on fisheries and to advise them on the best ways to adapt the sector. (facilitate mainstreaming)
* To advise Mr. Mahatante on the most appropriate approach and methodology for his study.

**Specific tasks:**

* Read and analyse relevant documents and background materials
* Visit fishery sites in the *Androy* Region
* Interview stakeholders
* Analyse collected information
* Develop an appropriate approach and methodology for the PhD study
* Prepare workshop contents and materials
* Conduct 2 workshops

**Outputs to be delivered:**

* Workshop materials and powerpoint presentations
* Study approach and methodology for the CC-related issues in the development of the fishery sector in the region
* Mission report to the CSF-Administrator/ACP Secretariat

**Organisational issues**

**Place:**

Madagascar and home-based

**Duration &Indicative Planning:**

The mission should start as soon as possible after approval of the Work Order. The exact starting date should be agreed with the coordinating person in Madagascar (contact details are given below). The overall implementation period of the mission (from starting date to debriefing) should not exceed 1,5 calendar months.

Preparation phase: 4 days

Establish a programme for the in-country phase; reading background materials and technical preparation for the tasks to be carried out in Madagascar.

In-country phase: 14 days

Interviews and discussions with stakeholders, site visits, analysing collected information, preparing and conducting the workshops.

Report writing and debriefing in Brussels: 2 days

Debriefing will take place after submission of the mission report and in consultation with the ACP Secretariat. If the consultant is not based in Belgium, debriefing will be done by telephone/skype.

International Travel: 2 days

**Inputs required**

1. To be provided by the Climate Support Facility

CSF expert (category “non-key senior experts”): 22 working days; one return ticket to Toliara (Madagascar); per diems (14x Madagascar); costs for local transport outside Toliara (car rent for 10 days + fuel, estimated at € 1,300); support for the organisation of two workshops (estimated at € 2200).

Consultant profile:

Relevant academic background.

At least 6 years professional experience in the fishery sector in ACP countries.

Proven experience in interlinking fisheries with climate change.

Proven experience in capacity building and coaching.

Fluent in French.

1. To be provided by the beneficiary

Venue for the two workshops; support staff for organising the workshops logistics, including the invitations; relevant contacts / stakeholders in Madagascar; relevant information and background materials. During the preparatory phase, Mr. Mahatante will prepare the work programme and logistics for the in-country-phase in consultation with the CSF expert. During the in-country phase, Mr. Mahatante will be full time available to work with the consultant.

**Coordinating person in Madagascar**

Tsimanaoraty Paubert MAHATANTE

Institut Halieutique et des Sciences Marines (IH.SM) de l’Université de Toliara

Madagascar

**Supervising person in Madagascar**

Prof. MARA Edouard Remanevy

Institut Halieutique et des Sciences Marines (IH.SM) de l’Université de Toliara

Madagascar

**Annexes:**

1. **Preliminary list of persons to consult/institutions to visit**
   * University of Toliara
   * Institute for Fishery and Marine Sciences
   * Regional and local authorities
   * Regional Fishing department
   * Regional environmental department
   * Local Organizations, Projects & NGOs in the fisheries sector
   * Knowledgeable people in *Androy* region
   * …
2. **Preliminary list of documents to consult**
   * PhD Proposal
   * National fishing reports
   * National environmental reports
   * Regional plan for development of *Androy*
   * Regional fishing reports
   * Regional environmental reports
   * Monograph of *Androy* region
   * Old documents (written by Robert Drury, Battistini, DECARY…)
   * Literatures about *Androy*
   * Reports about the Deep South Expedition by the MNHN of Paris
   * …