



**WORK PROGRAMME**

**on**

**CO-OPERATION IN THE FIELD OF  
CLIMATE CHANGE VULNERABILITY, RISK ASSESSMENT, ADAPTATION AND  
MITIGATION**

**Between**

**THE MINISTRY FOR THE ENVIRONMENT, LAND AND SEA  
OF THE REPUBLIC OF ITALY**

**and**

**THE MINISTRY OF THE ENVIRONMENT AND ENERGY  
OF THE REPUBLIC OF MALDIVES**

## WORK PROGRAMME

Following the Memorandum of Understanding (MOU) signed in Paris, on December 9, 2015, between the Ministry for the Environment and Land and Sea of the Republic of Italy and the Ministry of Environment and Energy of the Republic of Maldives, the Parties agree to implement the following Work Programme.

### Objectives

The objectives of the Work Programme are to identify, select and plan activities and projects, that correspond to the general objective of the MoU, to strengthen and coordinate efforts to combat the adverse effects of climate change and to support the implementation of mechanisms for regional climate change vulnerability and risk assessment, adaptation and mitigation, in the Republic of Maldives.

In accordance with Article 3.3 of the aforementioned MoU, in the course of the implementation of the projects and activities, consideration will be given to the participation of the public, private and non-profit sectors and, where appropriate, Universities, scientific and technical research bodies and Non-governmental Organizations, as well as Institutions coming from Italy and the Maldives.

In accordance with Article 2.1 of the MoU, and taking into account the indications provided by the Intended Nationally Determined Contributions (INDCs) submitted on September 2015, and by the National Adaptation Programme for Action presented on December 2006, both by the Republic of Maldives, this Work Programme aims to focus on the following areas of interest:

- 1) improving of climate data collection, management and forecasting: early warning systems;
- 2) water scarcity challenges (water treatment, mainly water desalinization).
- 3) renewable energies (promotion and development of the use of renewable energies, in order to achieve the established national target).

### Description of Activities

#### **1.1 Improving of Climate Data Collection, Management and Forecasting: Early Warning Systems**

One of the most damaging consequences of climate change is sea level rise, which in recent years has been shown to occur at alarming rates. The Republic of Maldives is subject to this problem, as well as

to other specific vulnerabilities, due to intense and important climate variations that have consequences that impact the whole planet, such as long term changes in the intensity, distribution and prevalent paths of tropical cyclones and other extreme weather phenomena. The activity will be consistent in the following actions:

- strengthening early warning capacity to collection, analysis, management and use of relevant data, on the evolution of weather events (such as El Nino, Indian Ocean Dipole Mode and tropical cyclon activities);
- strengthening disaster risk governance and national capacities for disasters prevention, mitigation, preparedness;
- development capacity to expand national capacity to collect and analyses data of sea level rise;

The aim is strength the national capacity to implement practical adaptation actions and measures and build a climate resilient infrastructure to address impacts of climate change. In particular, provide information to support decision-makers to reduce the impact of weather-climatic hazards and related risks in the sectors potentially affected.

## **1.2 Water Scarcity Challenges (Water Treatment, Mainly Water Desalinization)**

The Republic of Maldives has very limited freshwater resources, and this aspect represents a crucial concern, recognized as one of the most urgent priorities in the National Adaptation Programme for Action. The aim is to tackle water scarcity challenges focusing on cost effective desalination technology.

Water desalination has become a technologically and economically viable solution to tackle the challenges associated with increasing water shortages, existing in many regions of the world. Yet, desalination is an energy intensive process normally requiring high tonnage plants that utilize expensive and non-renewable fossil fuels, which in turn contribute to global warming and air pollution.

The activity will be consistent in the following actions:

- identify appropriate pilot site/sites for installing a desalinization plant;
- implementing the pilot project.



### **1.3 Development of the Use of Renewable Energies, in Order to Achieve the Established National Target**

The aim is to deploy a high share of renewable energy and associated renewable energy technology, to achieve a low emission development future and ensure energy security.

To this end, action will be focused on PV deployment options that bypass land availability constraints.

Mainly, the activity will be consistent in the following actions:

- identifying options to expanding solar PV deployment;
- identifying suitable locations for solar Stand Alone PV installations and estimating potential capacity;
- installing pilot systems;
- investigating possible use of ocean energy for power generation.

The achievement will be a concrete step to help accelerate the Maldives' transition towards renewables and to facilitate the attainment of the target for greenhouse gas emissions reduction.

### **1.4 Capacity Building: Environmental Education and Training**

The aim is to strengthen the national technical capacity and quality of local expertise in environmental management, and above all to strengthen the capacity to effectively address environmental concerns and risks resulting from global climate change with the purpose to help young researchers having a role in national and regional policy development and decision making, to manage, mitigate and resolve climate change -related challenges; and programmes on Science and Management of Climate Change to gain in-depth understanding of climate processes and their interactions.

The action includes the following components:

- environmental education, mainly in the renewable energy sector;
- exchange of best practices and projects, developed under the framework of the bilateral cooperation between the Italian Ministry for the Environment Land and Sea and Pacific Small Island States, on the development of renewable energy policies and practices and the utilization of renewable energies.

**Entry into force**


This Work Programme will come into force after signature by the Parties.

This Work Programme is agreed and signed in Rome on 10/03/2016 in English.

For the Ministry for the Environment, Land and  
Sea of  
the Republic of Italy

Director General

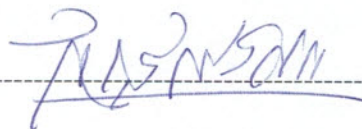
Dr. Francesco La Camera



Date ..... 10/03/2016 .....

For the Ministry of Environment and Energy  
of  
the Republic of Maldives

 Director General



Date ..... 10/03/2016 .....