



WMO OMM

World Meteorological Organization
 Organisation météorologique mondiale
 Organización Meteorológica Mundial
 Всемирная метеорологическая организация
 المنظمة العالمية للأرصاد الجوية
 世界气象组织

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Anexo: 1 (disponible en inglés solamente)

Asunto: Información actualizada sobre la participación de la Organización Meteorológica Mundial en el 23^{er} período de sesiones de la Conferencia de las Partes de la Convención Marco de las Naciones Unidas sobre el Cambio Climático, así como del 13^{er} período de sesiones de la Conferencia de las Partes en calidad de reunión de las Partes en el Protocolo de Kyoto y la segunda parte del primer período de sesiones de la Conferencia de las Partes en calidad de reunión de las Partes en el Acuerdo de París (Bonn, Alemania, 6 a 17 de noviembre de 2017)

Finalidad: Solicitar a los representantes de los Servicios Meteorológicos e Hidrológicos Nacionales que tomen nota de la reseña de orientación política adjunta e indiquen de qué manera la Organización Meteorológica Mundial puede brindar más apoyo a esos Servicios para su participación en los procesos de la Convención Marco de las Naciones Unidas sobre el Cambio Climático

Estimado señor/Estimada señora:

A medida que se aproximan las fechas del 23^{er} período de sesiones de la Conferencia de las Partes (CP 23) y de las reuniones conexas, me complace compartir con usted más información que puede serle útil al considerar su participación y la de su país en esas reuniones.

Como lo indiqué en mi carta circular de fecha 14 de septiembre de 2017, la Conferencia de las Naciones Unidas sobre el Cambio Climático se celebrará en la sede de la Secretaría de la Convención Marco de las Naciones Unidas sobre el Cambio Climático (CMNUCC) en Bonn (Alemania) del 6 al 17 de noviembre de 2017. La Conferencia estará presidida por el Gobierno de Fiji e incluirá el 23^{er} período de sesiones de la CP, el 13^{er} período de sesiones de la Conferencia de las Partes en calidad de reunión de las Partes en el Protocolo de Kyoto (CP/RP 13) y los 47^o períodos de sesiones del Órgano Subsidiario de Asesoramiento Científico y Tecnológico (OSACT 47) y del Órgano Subsidiario de Ejecución (OSE 47). También incluirá la cuarta parte del primer período de sesiones del Grupo de Trabajo Especial sobre el Acuerdo de París (GAP 1.4) y la segunda parte del primer período de sesiones de la Conferencia de las

A los Representantes Permanentes (o Directores de los Servicios Meteorológicos o Hidrometeorológicos) de los Miembros de la OMM

copias: Asesores hidrológicos de los Representantes Permanentes

Partes en calidad de reunión de las Partes en el Acuerdo de París (CP/RA 1.2). La fase de alto nivel de la CP 23 y la CP/RP 13 se celebrará del 15 al 17 de noviembre de 2017.

El Acuerdo de París, resultado de la CP 21 (París, diciembre de 2015), domina el programa de la CP 23. La aplicación de este Acuerdo depende en gran medida de las contribuciones determinadas a nivel nacional (CDN) que las Partes hayan notificado. Las CDN son instrumentos esenciales para la acción climática en el marco de la CMNUCC y para su elaboración es fundamental disponer de información científica sobre el clima, especialmente en materia de adaptación. A este respecto adjunto a la presente, para su consulta, una reseña de orientación política sobre el papel que desempeñan los Servicios Meteorológicos e Hidrológicos Nacionales (SMHN) en la aplicación de los planes nacionales de adaptación (PNAD). Más adelante, la reseña estará disponible en todos los idiomas de las Naciones Unidas en la siguiente página web de la Organización Meteorológica Mundial (OMM): <https://public.wmo.int>.

La OMM está codirigiendo los preparativos para la celebración de varios eventos paralelos que se inscriben en el ámbito del sistema de las Naciones Unidas, a saber:

- 1) **Ciencia:** Importancia de la ciencia para la adaptación y la mitigación en el marco del Acuerdo de París,
- 2) **Reducción de riesgos de desastre:** El Marco de Sendái como base para la aplicación y el seguimiento del Acuerdo de París,
- 3) **Agua:** Medidas relacionadas con el clima para una mejor gestión del agua, y
- 4) **Océano:** Un océano resiliente para las generaciones futuras.

Asimismo, La OMM se sumará a la exposición de la Iniciativa Una ONU con el fin de dar a conocer el papel de la Organización y la contribución de los SMHN de sus Miembros a la CMNUCC. También se están planificando otros muchos eventos. La fecha y el programa de los eventos de interés para la OMM, así como los documentos y el material conexos, se publicarán en el sitio web de la Organización para la CP 23 a su debido tiempo (en el enlace antes mencionado).

El Consejo Ejecutivo, en su 69ª reunión, tuvo en cuenta los resultados de la CP 22 y la aplicación del Acuerdo de París. Los servicios climáticos para los sectores de la energía, el agua, la salud pública, el transporte y la industria, así como la agricultura y el uso de la tierra, contribuyen a una economía con bajas emisiones de carbono y resiliente al clima mediante la aplicación del Marco Mundial para los Servicios Climáticos (MMSC). Entre otras cosas, en dicha reunión el Consejo Ejecutivo invitó a los Miembros:

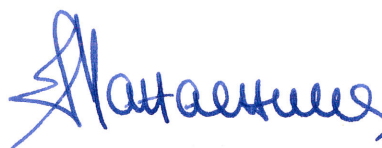
- a que trabajen a nivel nacional para que los SMHN participen plenamente como actores fundamentales en la catalogación de los fenómenos extremos, los programas de adaptación, las actividades de mitigación y otras esferas que entran en el ámbito de su competencia, y a que colaboren en la elaboración de las CDN y el desarrollo de los sistemas de vigilancia de los gases de efecto invernadero y otros sistemas de observación, y
- a que participen en marcos institucionales para los servicios climáticos a nivel nacional o, si es necesario, los establezcan, que sirvan de mecanismos de coordinación fundamentales con miras a reunir a las partes interesadas necesarias para la creación, la adaptación, la comunicación y el uso

satisfactorio de servicios climáticos a fin de facilitar una mejor adopción de decisiones.

Quisiera animarle a que participe en la CP 23 en calidad de miembro de su delegación nacional para reforzar el papel que desempeñan los SMHN en cuanto contribuyentes al proceso de la CMNUCC. Si bien la OMM no podrá brindar asistencia financiera para su participación en la CP 23, le agradecería que me enviara sus sugerencias sobre cómo puede la Organización ayudar a su Servicio para que brinde apoyo al gobierno de su país en la aplicación de la CMNUCC y el Acuerdo de París.

Si usted o alguien de su Servicio tiene previsto asistir a la Conferencia, le agradecería que informase de ello a la señora Nadia Oppliger (noppliger@wmo.int) a más tardar el **22 de octubre de 2017**. En caso de que desee hacer alguna consulta, no dude en ponerse en contacto con el señor Amir Delju (adelju@wmo.int).

Le saluda atentamente.



(E. Manaenkova)
por el Secretario General



POLICY BRIEF

The Role of National Meteorological and Hydrological Services (NMHSs) in National Adaptation Plans (NAPs)

Executive Summary

National Adaptation Plans (NAPs) are key instruments for enhancing and scaling up climate action under the [United Nations Framework Convention on Climate Change](#) (UNFCCC). NAPs provide a vehicle for implementation of climate services which is formally recognized by UNFCCC Parties and backed by significant international financing. It is essential that NAPs benefit from scientific information on climate variability, trends and extremes and contain provisions that promote the climate services needed to achieve the best possible climate-related development outcomes.

This policy brief is intended to facilitate understanding concerning the role of National Meteorological and Hydrological Services (NMHSs) in the provision of climate services to design and implement NAPs. NMHSs are encouraged to liaise with NAP focal points within their governments and explore the elements and areas of competency to which they can actively contribute.

1. Introduction

The [Paris Agreement](#), adopted by the 21st session of the UNFCCC Conference of Parties (COP-21), calls for all countries to engage in the process of formulation and implementation of NAPs. The NAP process will harmonize national adaptation priorities with key policy planning processes such as Nationally Determined Contributions (NDCs), submitted by Parties under article 3 of Paris Agreement.

As of 14 August 2017, 159 out of the 197 Parties to the Convention have ratified the Paris Agreement, of which 152 have submitted their first NDCs to the UNFCCC. Of these submissions, 102 include an adaptation component, the majority being from developing countries. The NAP process is mentioned in 39 NDCs, of which 23 note that it has commenced and 16 state that it will start by 2020 (Figure 1). The establishment of synergies and systematic linkages between the adaptation components of NDCs and NAPs will facilitate the scale up of adaptation investments for the near and medium term in many vulnerable developing countries.

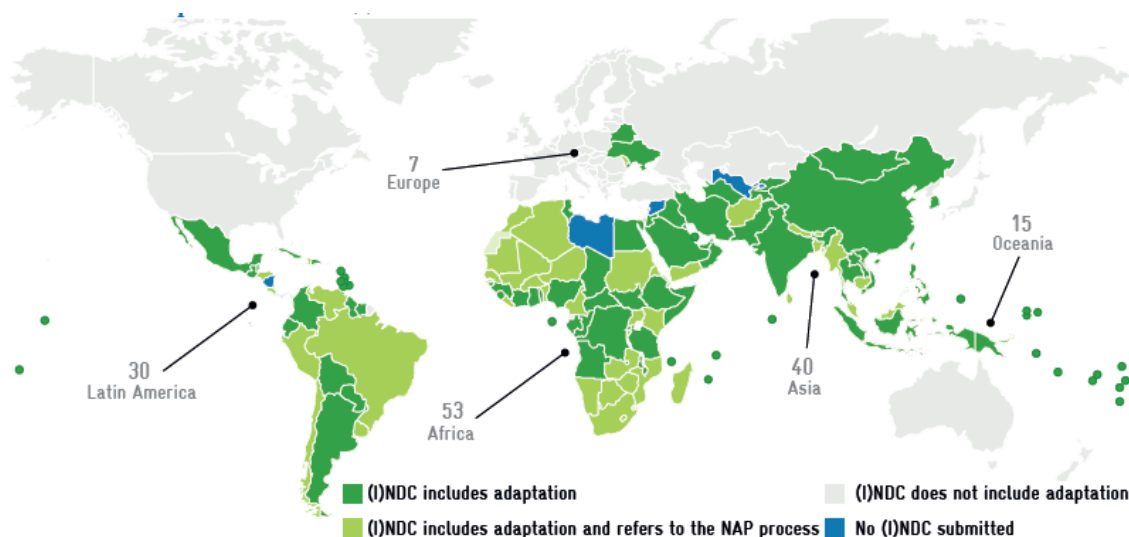


Figure 1 Countries which included an adaptation component and referred to the NAP process in their (I)NDC (Source: GIZ, 2017)

NAPs will also permit countries to align national adaptation results and performance measures to regional and global development objectives and frameworks, as defined by the [Agenda 2030](#). As vulnerability reduction is the core and common element of both adaptation and disaster risk management, a closer integration between NAPs and the [Sendai Framework for Disaster Risk Reduction](#) (March 2015), will also create synergies between reducing loss and damage and protecting sustainable human development.

The Paris Agreement emphasizes that adaptation should be based on, “Information and scientific knowledge on climate, including research, systematic observation of the climate system and early warning systems, in a manner that informs climate services and supports decision-making” (Article 7, paragraph 7). This creates demand for climate services which provide science-based and user-specific information relating to past, present and potential future climate, addressing all climate-affected sectors. NDC adaptation priority areas and sectors include water, agriculture, health, ecosystems, infrastructure, forestry, energy, disaster risk reduction, food security, coastal protection, and fisheries. These priorities encompass all [Global Framework for Climate Services](#) (GFCS) priority areas and align with the [GFCS Implementation Plan](#), which provides extensive guidance for climate service implementation.

2. *What is a National Adaptation Plan?*

A NAP is an iterative process that aims to integrate considerations of climate change adaptation into policy-making, budgeting, implementation and monitoring processes at national, sectoral and sub-national levels. The objectives of NAP process (decision 5/CP.17 paragraph 1) are twofold:

1. To reduce vulnerability to the impacts of climate change, by building adaptive capacity and resilience; and
2. To facilitate the integration of climate change adaptation into new and existing policies, programs and activities within all relevant sectors and at different levels.

NAPs build on existing policy processes and coordination structures, and should be based on sound scientific evidence.

Initial guidelines for the formulation of NAPs were released in 2013 by the Least Developed Country Expert Group (LEG)¹ of the UNFCCC. The LEG [NAP Technical Guidelines](#) contain a list of indicative activities that can be undertaken in the development of NAPs, grouped under four headings.

1. Laying the groundwork and addressing gaps;
2. Preparatory elements;
3. Implementation strategies;
4. Reporting, monitoring and review.

Climate information is essential in all four of these areas (Figure 2).

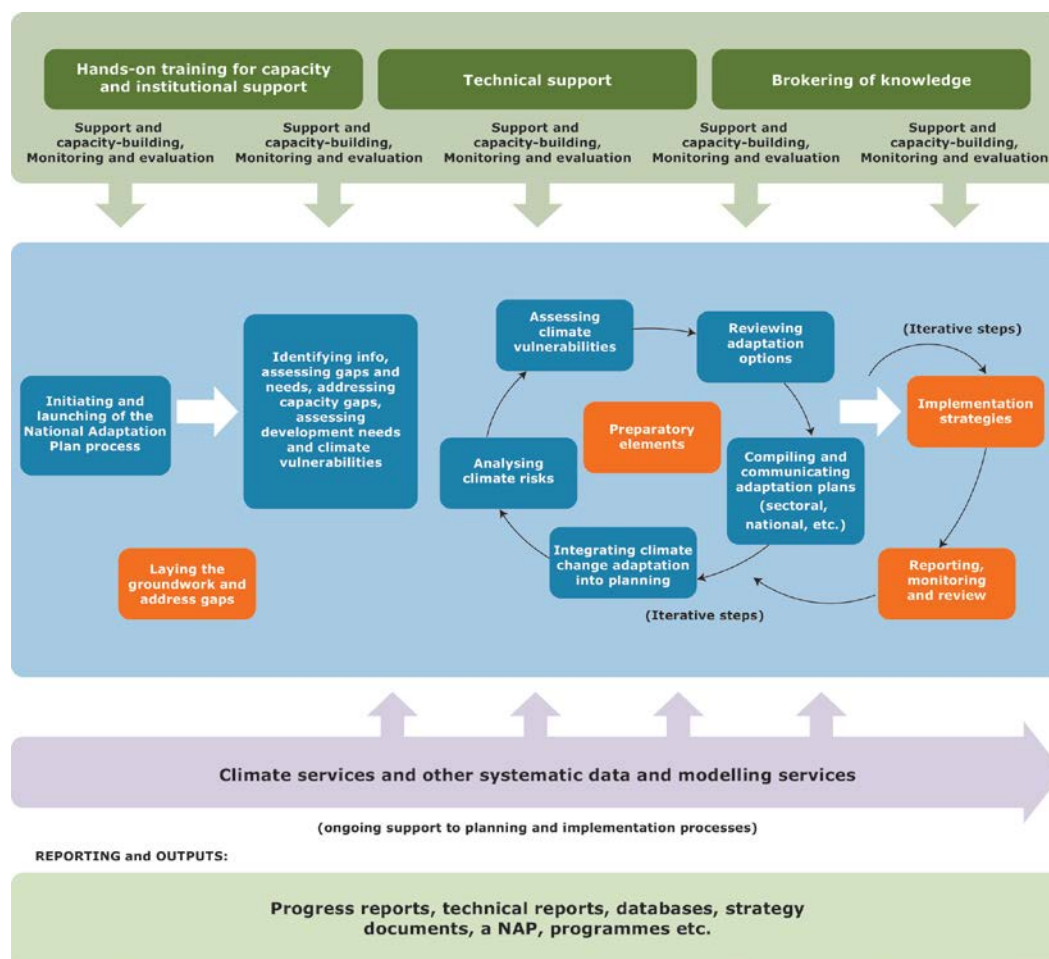


Figure 2 How climate information and services support the National Adaptation Plan process (Source: [WMO, 2016](#))

3. How can climate information and services support the NAP process?

A number of elements in the NAP process require effective and timely climate services. These include assessment of climate vulnerabilities and identification of adaptation options, development of products that help improve the understanding of climate and its impacts, and enhancement of capacity for planning and implementation of adaptation (Table 1).

¹ The LEG was established by the COP in 2001 to provide technical guidance and advice to the least developed countries (LDCs) on the national adaptation programmes of action (NAPAs), the LDC work programme and the national adaptation plan (NAP) process.

Table 1 - Weather, climate and hydrology services that support the different elements of the NAP process

NAP ELEMENTS AND STEPS	Weather, climate and hydrology services
Element A. Lay the groundwork and address gaps	
Stocktaking: identifying available information on climate change impacts, vulnerability and adaptation and assessing gaps and needs of the enabling environment for the NAP process	<ul style="list-style-type: none"> • Archive of past losses • In situ and space-based Earth system observing networks for the monitoring and detection of hazards • Archives and real-time data records flagging when events can be expected for dynamic risk assessment • Real-time monitoring of hazards and development of historical databases
Addressing capacity gaps and weaknesses in undertaking the NAP process	<ul style="list-style-type: none"> • Identify responsible bodies for developing and implementing appropriate measures, warning communication and awareness and education activities
Comprehensively and iteratively assessing development needs and climate vulnerabilities	<ul style="list-style-type: none"> • Provide understanding of risk-assessment demand and requirements • Incorporate relevant climate observations, statistical analysis, forecasts and projections of the weather, hydrological and climate-related extremes in risk assessment processes
Element B. Preparatory elements	
Analyzing current climate and future climate change scenarios	<ul style="list-style-type: none"> • Forward-looking forecasts and trend analysis of hazard characteristics at different temporal and spatial resolutions • Risk analysis (multi-hazard, multi-level and multi-sector) • Identification of information requirements and channels
Assessing climate vulnerabilities and identifying adaptation options at sectors, subnational, national and other appropriate levels	<ul style="list-style-type: none"> • Define requirements for climate services and other non-climate inputs for planning investment in reducing climate vulnerabilities • Engage stakeholders for implementation – finance and planning ministries, disaster risk management authorities, local authorities and government, private sector, etc. • Establish coordination and information channels for relevant information inputs
Reviewing and appraising adaptation options	<ul style="list-style-type: none"> • Identify stakeholders and existing processes for hazard loss-accounting system implementation • Coordinate development of relevant climate products and services in relation to specific application to decision-making in different sectors
Element C. Implementation strategies	
Prioritizing climate change adaptation in national planning	<ul style="list-style-type: none"> • Identify the areas where current information on weather and climate is inadequate
Developing a (long-term) national adaptation implementation strategy	<ul style="list-style-type: none"> • Identify priority regions based on analysis of vulnerability to weather and climate extremes
Enhancing capacity for planning and implementation of adaptation	<ul style="list-style-type: none"> • Strengthen operational climate services, including analysis, forecasts and projection of climatic regimes and interoperability with health, socioeconomic and biological data

4. Financing

Adaptation planning, and the NAP process specifically, is crucial for scaling up adaptation interventions. The financial instruments to support the NAPs are multi-fold, reflecting the complexity and flexibility of adaptation planning.

The UNFCCC has established various ways to transfer funds to developing countries, through the [Global Environment Facility](#) (GEF), the Kyoto Protocol's [Adaptation Fund](#) (AF), and most recently the [Green Climate Fund](#) (GCF) to finance implementation of the Convention and the Paris Agreement.

The GEF, which has been operating for more than 20 years, is the most well-established of these mechanisms. The GEF is responsible for administering three important adaptation-related trust funds: the Special Climate Change Fund (SCCF), the Least Developed Country Fund (LDCF), and the Adaptation Fund. WMO is not a GEF accredited entity, however, so for NMHSs to benefit from GEF funding, partnering with an accredited international organization, such as UNDP or the World Bank, is essential.

The GCF was created in 2010 as part of the UNFCCC's financial mechanism to facilitate the development of climate change strategies and plans, including NAPs. By following a country-driven and country-owned approach – in terms of funding and integrating the funding into national planning - the GCF will align climate finance with national priorities and planning processes. The GCF project portfolio is implemented by partner organizations, known as Accredited Entities, in liaison with National Designated Authorities (NDAs).

WMO has been designated an Accredited Entity (Decision B.12/30) to the GCF. This will allow WMO to support NMHSs and other stakeholders to implement GCF projects with budgets of up to USD 50 million. The GCF also provides USD 3 million to countries for NAP preparation, which WMO can support. WMO has submitted several project proposals to GCF aimed at strengthening the national weather, hydrology and climate services in order to improve the adaptation planning in different sectors, such as agriculture, energy, health, water and disaster risk reduction.

WMO is designated an Accredited Entity to the GCF. This role will allow to support the NMHSs in providing climate information services for NAPs.

The AF has been also pioneering innovations in climate finance. Through a direct access mechanism, National Implementing Entities (NIEs) are able to directly obtain finance and manage climate adaptation and resilience projects. The focus of the AF is particularly on supporting concrete and localized projects that help vulnerable communities to meet urgent adaptation needs. Under the AF, WMO has recently received funding for a regional programme on agricultural climate resilience in East Africa which will improve adaptive capacity to current climate variability and change among farmers, agro-pastoralists and pastoralist communities through a better use of climate information.

5. *Guidance on the provisions and scale-up of climate services to the NAP*

WMO (2010) highlighted how only a small number of countries identified WMO, Regional Associations and Regional Meteorological/Climate Centres as key partners in delivering technical services for adaptation. This low result may reflect the current capacity and relationships of these organizations and NMHSs for contributing to the policy process for adaptation. Several measures can strengthen the role and contribution of NMHSs to the NAP process:

- Increase NMHS visibility and recognition within Government and national organizational structures engaged in national adaptation planning;
- Enhance an understanding of the value of NMHS services to the NAP process;
- Strengthen linkages with other organizations and sectors involved in NAPs;
- Enhance legislation or policies regarding the role of the NMHSs in adaptation.

Climate services require multi-disciplinary and multi-institutional collaboration across national institutions and sectoral stakeholders. To achieve this, National Frameworks for Climate Services (NFCS) are key to support the development and application of climate services. A NFCS is an institutional mechanism to coordinate, facilitate and strengthen

collaboration among national institutions to improve the co-production, tailoring, delivery and use of science-based climate predictions and services. NFCSs create the space for sustained dialogue between users from climate sensitive sectors and providers for the identification of gaps, needs and priorities to enable improvements and sustainable delivery of climate services.

Given the representation of providers and sectoral users of climate services, a NFCS could act as a vehicle for producing the necessary inputs for the NAP process. In particular, for example, NFCSs are the ideal place for assessing development needs and climate vulnerabilities (Element A) and identifying climate services as adaptation options at sectoral level as well as reviewing and appraising those options (Element B). NFCSs should be backed by legislative decrees which provide the political endorsement needed by the frameworks to operate.

As resource availability can be a key limitation on NMHSs' ability to provide climate-related products to interested stakeholders, partnering for scaling-up climate finance is strategic. NMHSs are encouraged to continue their active participation in the UNFCCC processes by consulting and partnering with national designated authorities and focal points through direct or designated in-house liaisons. Engagement in funded projects entails national and international collaboration with entities on preparation and implementation of project proposals.

WMO is source of targeted technical advice for integrating weather and climate information and services into project proposals submitted by Parties. Particularly under the new financial windows of the UNFCCC, there is an opportunity to strengthen the scientific and technical dimension of GCF project concepts that focus on issues such as agriculture and food security, water, energy, health and Disaster Risk Reduction (DRR).

By invitation of COP-17, international organizations and other relevant partners established the UNDP-UN Environment [NAP Global Support Programme](#) (NAP-GSP). The aim of this programme is to strengthen LDCs' institutional structures, knowledge and technical capacity for designing and implementing NAPs. Strengthened synergies across UN-supported initiatives (NAP-GSP, GFCS, etc.) will ensure the optimal use of the existing technical, financial and human capacity resources as to support the role of NMHSs in the NAP process.

Thanks to the unique access they provide to weather, water and climate information, NMHSs can offer significant value added to increase quality and impact potential of adaptation activities, which can promote private finance mobilization. The engagement with the private sector through public-private partnerships (PPP) will be crucial as to access innovative cost-effective technologies (e.g. dissemination of adaptation information through communication devices). At the same time, enhanced climate information services will incentivize enterprises to re-orient their investments to take account of climate risks so as to ensure business continuity and profitability in a changing climate.

6. Conclusions

The Paris Agreement will significantly increase demand on NMHSs for user-oriented weather, hydrological, climate and related environmental services. NMHSs are well positioned to back-stop and advance the NAP process in all vulnerable countries, as well as meet the evolving needs of governments, partners and other decision-makers to achieve sustainable development. NMHS engagement in NAP preparation and implementation will substantially enhance countries' abilities to address the risks associated with, and realize benefits from, climate variability and change.

7. *References*

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