Contributions to the 2030 Agenda for Sustainable Development

ECOSOC functional commissions and other intergovernmental bodies and forums, are invited to share relevant input and deliberations as to how they address goals and targets from the perspective of "*Ensuring that no one is left behind*".

Inputs could follow the following template, inspired by the report of the Secretary-General on Critical milestones towards coherent, efficient and inclusive follow-up and review at the global level (A/70/684).

Submissions will be publicly posted online at the United Nations Sustainable Development Knowledge Platform, at sustainabledevelopment.un.org, as input to the 2016 meeting of the High-level Political Forum on Sustainable Development.

Please send the completed form no later than **16 May 2016** to the Secretariat's e-mail pietracci@un.org

Submission Form

1. **An assessment of the situation regarding the principle of "ensuring that no one is left behind" at the global level:**

Scientific evidence of a warming trend of the climate system is compelling - an average rise in global sea levels of some 3mm per year in recent decades, declining Arctic sea ice, the melting of mountain glaciers, earlier flowering of plants and trees, changes in ecosystems and the occurrence of more frequent extreme weather and climate events, just to cite a few.

The long-term goal of keeping the increase in global average temperature to well below the threshold of 2°C above pre-industrial levels adopted by the Paris Agreement is generally regarded as the gateway to dangerous warming. This level of warning however could cause overall changes with impacts in food production, freshwater availability, disaster risk and the occurrence of epidemics outbreaks.

Managing the current and future climatic risks is central to achieving the goals of the 2030 Agenda and other major global initiatives such as the Paris Agreement, the Sendai Framework, and the SAMOA Pathway. The widespread influences of climate on the major agendas mean that provision of weather and climate services can make communities, critical infrastructure, businesses and ecosystems more resilient to climate impacts, thus saving lives and improving livelihoods. The demand for accessible, tailored and accurate weather and climate services will continue to grow in the years to come driven in part by concerns over climate change and the occurrence of extreme events such as heat and cold waves, storms, flooding and drought. It will also reflect the need to respond to new human vulnerabilities resulting, for example, from migration and the growth of megacities and coastal developments.

2. The identification of gaps, areas requiring urgent attention, risks and challenges:

Climate services provide science-based and user-specific information for managing the risks and exploiting the opportunities created by climate variability and climate change. They assist policymakers and decision-makers responsible for a wide range of climate-sensitive sectors to take practical actions based on the best-available climate and other relevant scientific and socio-economic research and information. In this way, climate services can help society to become more resilient and to cope with the growing impacts of climate change.

For example, the provision of more and better climate services will allow farmers to fine-tune their planting and marketing strategies based on seasonal climate forecasts; empower disaster risk managers to prepare more effectively for droughts and heavy precipitation; assist public health services to target vaccine and other prevention campaigns to limit climate-related disease outbreaks such as malaria and meningitis; and help improve the management of water resources. These activities all contribute to appropriate adaptation planning to a changing climate

In recognition of this increasingly important role of climate services, the international community established the Global Framework for Climate Services (GFCS) in 2009 as an outcome of the World Climate Conference 3 (WCC-3). The GFCS is the principal platform for expanding, improving and coordinating the delivery of climate services for decision-making on climate change and sustainable development. It boasts global reach and access to unsurpassed meteorological, hydrological, and climatological knowledge and expertise. The GFCS offers the best available opportunity to channel the energies of existing services, initiatives and investments from various stakeholders into creating practical solutions. It focuses on supporting about 70 countries around the world, mostly least developed countries (LDCs) and Small Island Development States (SIDS), who today are not able to develop and effectively apply climate services for climate risk management and adaptation to climate variability and change.

It collaborates through the GFCS Partner Advisory Committee and enables countries and regions to coordinate their activities for fully operational climate services. These partners include the European Commission (EC), the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT), the Food and Agriculture Organization of the United Nations (FAO), the Global Water Partnership (GWP), the International Federation of Red Cross/Red Crescent Societies (IFRC), the International Union of Geodesy and Geophysics (IUGG), the United Nations Development Programme (UNDP), the United Nations Office for Disaster Risk Reduction (UNISDR), the United Nations Institute for Training and Research (UNITAR), the World Bank, the World Business Council for Sustainable Development (WBCSD) and the World Food Programme (WFP).

3. Valuable lessons learned on ensuring that no one is left behind:

Ensuring the availability of, and access to, high-quality weather and climate services tailored to address the specific decision-making requirements of various users requires urgent action through partnerships. Partnerships provide means for GFCS partners to leverage their expertise and technical capabilities to support climate services related-activities at the country level. Each area of work will

be implemented by the relevant GFCS partners. Investments and other support are needed to enable partners to carry out the specific activities for improving the technical and scientific capacities of countries. The resources required are a small fraction of the vast resources that are being invested and will continue to be invested in addressing adaptation to climate variability and change. This fraction, however, is critical for putting in place the building blocks to enable the development of tailored products and services for addressing user needs.

4. Emerging issues likely to affect the realization of this principle:

Effective coordination and collaboration from the global to the national levels to catalyse the actions of the various stakeholders to make climate services fully operational. Collaborating through a common platform such as the GFCS the various actors can contribute in a systematic manner to enhance user engagement through user-interface mechanisms in order to improve service delivery by strengthening national, regional, and global coordination and delivery mechanisms; to support the development and application of climate services and to make them more immediately useful for climate risk decision-making in the priority areas of agriculture and food security, disaster risk reduction, energy, health, and water; and to upgrade and expand the technical and scientific capabilities that countries need in order to provide user-driven climate services such as such as early warning systems, climate observing systems, research, and capacity development. Achieving these objectives will require carrying out specific activities for improving the technical and scientific capacities of countries.

The Operational Plan is the GFCS's central vehicle for providing the technical advisory, planning and coordination services needed to make these national investments technically sound, effective and sustainable. The Plan will also enable the GFCS to assist least developed countries to develop and implement national adaptation plans (NAP) by strengthening the scientific and technical capabilities needed to generate climate knowledge for effective decision-making. The Plan will provide evidence and data for attributing loss and damage caused by hydrometeorological disasters in a changing climate, and it will support climate services for mitigation and renewable energy, thus contributing to a low-carbon development path.

5. Areas where political guidance by the High-level Political Forum on Sustainable Development is required:

Weather and climate services will empower the poor, communities, business and nations to reduce exposure and vulnerability to climate related extreme events.

Currently most LDCs and SIDS do not have the technical and scientific capacities to effectively develop and apply weather and climate service to support decision-making for improved climate risk management. Investments are needed for these countries to build the needed technical and scientific capabilities such as observation networks, training of personal and establishment of effective early warning systems. The benefits resulting from such investments are far greater that the losses they will help prevent.

6. Policy recommendations on ways to accelerate progress for those at risk of being left behind:

Implementation of specific projects such as the GFCS Adaptation Programme in Africa that supports Malawi and Tanzania in providing climate services for health, disaster risk reduction and food security assists communities and countries to use climate information and services in support of decision-making. It also helps countries access scientific information about the climate for the development of National Adaptation Plans (NAPs). Through this project technical expertise at the national and regional levels are being strengthened to support the production and application of climate services. In addition, the project is helping countries to build coordination platforms that bring together stakeholders from diverse disciplines and sectors to design climate services all their respective needs.

Climate services support SGD goals in the following ways:

- **Goal 1 End poverty in all its forms everywhere**: Seasonal and long-term climate forecasts enable farmers, herders and fishers to make better informed decisions for better agriculture productivity, livelihoods, land use and food trade by anticipating and reducing their exposure and vulnerability to climate-related extreme.

- **Goal 2 End hunger, achieve food security and improved nutrition, and promote sustainable agriculture**: Tailored climate outlooks, forecasts, advisories, and farmer-focused services help food insecure communities safeguard and enhance crop yields, improving food security.

- **Goal 3 Ensure healthy lives and promote well-being for all at all ages**: Effective disease surveillance and climate-linked early warning systems decrease morbidity and mortality resulting from mosquitoes, floods and droughts by supporting timely and targeted health interventions.

- **Goal 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**: The system for water quality monitoring and heat-wave warning reduce illnesses of those in vulnerable situations like children and women, enabling them to attend school regularly.

- **Goal 5 Achieve gender equality and empower all women and girls**: Climate informed services provide financial resources, tools, and strategies (e.g. Index Insurance) improving women and men employment opportunities, access to natural resources, and ownership of land, improving their food and financial security and resilience

- **Goal 6 Ensure availability and sustainable management of water and sanitation for all**: The data and analyses on the hydrological cycle and seasonal downscaled forecasts improve local and regional allocation of water resources and enhance the sustainable use of water across different sectors.

- **<u>Goal 7</u> Ensure access to affordable, reliable, sustainable and modern energy for all**: Climate services assist in achieving mitigation targets by informing decisions on energy infrastructure investments, increasing energy efficiency and promoting sustainable energy development, which increases access to affordable, sustainable, and reliable energy sources.

- **<u>Goal 8</u> Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**: Strengthening an adaptive capacity and resilience to climate change supports achieving higher levels of social and economic development and productivity.

- **<u>Goal 9</u> Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation**: Climate monitoring and long-term projections are critical to inform infrastructure projects, city planning, climate-proofing and smart building designs, construction of dams and sea walls etc. in coastal and other climate-vulnerable areas.

- **<u>Goal 10</u> Reduce inequality within and among countries**: Supporting climate services in particular for mostly least developing countries (LDCs) and Small Island Development States (SIDS) enhances representation and voice for developing countries in decision-making.

- **<u>Goal 11</u> Make cities and human settlements inclusive, safe, resilient and sustainable:** Climate services for urban areas monitor risks and project return periods and severity of extreme events, thereby reducing deaths and injuries from hazards, empowering the poor and vulnerable and supporting strategic planning for infrastructure and land zoning for climate-resilient cities.

- **<u>Goal 12</u> Ensure sustainable consumption and production patterns**: Seasonal and long-term climate projections provide critical information for the sustainable use and conservation of natural resources and the sustainability of production and consumption patterns.

- **Goal 13 Take urgent action to combat climate change and its impacts:** Coordination platforms that bring together stakeholders from diverse disciplines and Regional Climate Outlook Forums are promoting international action and cooperation on climate change. (Early warning systems for multiple hazards improve hydrometeorological disaster prevention, mitigation and preparedness strategies, increasing resilience to climate-related hazards.)

- **<u>Goal 14</u> Conserve and sustainably use the oceans, seas and marine resources for sustainable:** Climate information, warnings and forecasts such as for ocean acidity levels, or nutrient overload, can improve catch yields, help protect marine ecosystems and improve biodiversity, leading to economic gains and enhanced livelihoods.

- **<u>Goal 15</u> Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss:** Climate projections provide information on future habitat and ecosystem changes which can promote and advise conservation and restoration activities. Collaboration

through the Integrated Drought Management Project and other activities assists governments to develop proactive and integrated national drought-management policies.

- **<u>Goal 16</u> Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels:** Institutional strengthening of National Meteorological and Hydrological Services to help monitor climate variability and change, and provide critical advisory and tailored service for government, private and public sector development partners.

- **<u>Goal 17</u> Strengthen the means of implementation and revitalize the global partnership for sustainable development:** The GFCS operates as a distinct and diverse partnership that uniquely responds to the information needs of climate sensitive sectors and promotes the SDGs and the Sendai Framework for Disaster Risk Reduction 2015-2030.

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