



World  
Meteorological  
Organization

Weather • Climate • Water

Vol. 58 (3) - July 2009

# Bulletin

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## World Climate Conference-3

31 August–4 September 2009



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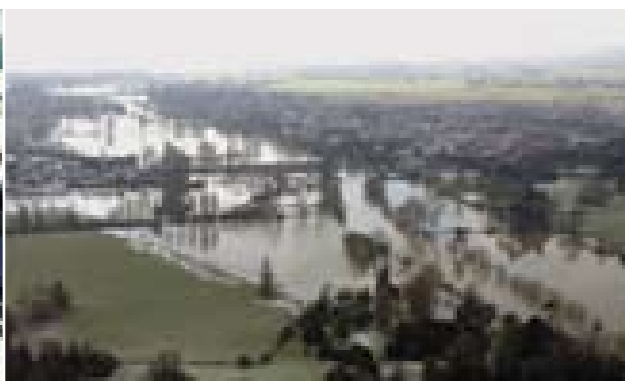
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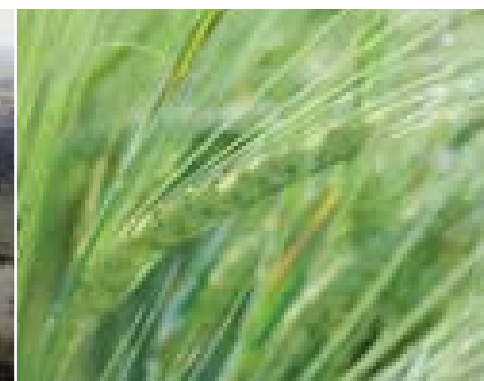
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The major expected outcome of World Climate Conference-3 is an international framework facilitating efforts to reduce the risks and realize the benefits associated with current and future climate conditions by incorporating climate prediction and information services into decision-making.

# Bulletin

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## WMO Bulletin

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# World Climate Conference - 3

## Better climate information for a better future

World Climate Conference-3 (WCC-3) will bring together scientists, high-level policy-makers and global business leaders and decision-makers to push forward global actions that enable society to become more resilient to current and future changes in climate. The focus is on the development and use of seasonal to multidecadal climate predictions for decision-making in socio-economic sectors. These sectors include food and agriculture, water, health, disaster preparedness and risk management, environment, forestry and fishery, tourism, transportation and energy, among others. Presentations will include information about advancements in climate predictions and services. WCC-3 follows the successes of the first and second World Climate Conferences, which mobilized global awareness of climate change and eventually led to the establishment of the Nobel-Peace-Prize-winning Intergovernmental Panel on Climate Change and the United Nations Framework Convention on Climate Change.

Visit us at:  
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Geneva, Switzerland  
 31 August–4 September 2009

Geneva International Conference Centre



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# In this issue

**There is little doubt now that climate change has serious development impacts.** Factoring climate change into the development process is not only a fundamental necessity in terms of guiding the international development policy framework but also an invaluable opportunity to reappraise the most pressing needs of a highly inequitable global society, with greatly differing social, environmental and economic levels of development.

The international debate on climate change has focused largely on the commitment—or failure to commit—to emissions reductions. This emphasis omits the pressing need to focus on the costs of present and future climate variability and its adverse impacts on vulnerable groups and climate-sensitive ecosystems. Both technological equity and efficiency (mitigation) and the capacity of communities to prepare themselves for climate change (adaptation) are fundamental to advancing international climate change negotiations.

It is encouraging that recent trends in negotiations incorporate concerns for actions in support of adaptation to climate variability. Adaptation to current climate variability would address not only present situations but also the challenges of future climate change in terms of building capacity. Early action will bring clear

economic benefits. There is an urgent need to focus on helping climate-vulnerable countries and communities deal with this issue effectively.

World Climate Conference-3 (WCC-3) takes place in Geneva, from 31 August to 4 September 2009 on the theme “Better climate information for a better future” to address these concerns.

Zillman traces the history of activities that have resulted in greater awareness, both at political and scientific level, about climate change. The article links various events over the past 50 years that have led to increasing cooperation among countries and international institutions that, in turn, has led to international arrangements such as the Intergovernmental Panel on Climate Change assessments and the United Nations Framework Convention on Climate Change negotiation process. It looks at the way climate science and international cooperation could further help address climate challenges.

Busalacchi and Asrar point out that the World Climate Research Programme (WCRP) was established in 1980 by WMO and partners to determine the predictability of climate and to determine the effect of human activities on climate. These fundamental objectives have laid the groundwork for society’s present adaptation and mitigation

response strategies to changes in climate. Thanks to WCRP efforts, it is now possible for climate scientists to monitor, simulate and project global climate so that climate information can be used for governance in decision-making and in support of a wide range of practical applications.

Climate science today provides seasonal-to-interannual predictions on various climatic parameters. Short- and medium-range climate predictions are essential for adapting to climate variations and mitigating their impacts. The Global Framework for Climate Services that is likely to emerge from WCC-3 would form the foundation for science-based climate information at different time-scales, thereby building the ability of countries to adapt to evolving climate phenomena more effectively. The Framework would provide such information at different scales from global to local in user-friendly format and fulfil the needs of decision-making processes in various sectors.

The frequency and intensity of major large-scale disasters related to climatic events such as fires, heat-waves, droughts, landslides, floods and outbreaks of disease will increase. Disaster prevention, preparedness, response and recovery should become an even greater priority for WMO Members. Rapid response capacities to climate change would need to be accompanied by a strategy for disaster

prevention and alert at global to local levels. Wahlström explores the linkages between climate change, disaster risk reduction and national development. She underscores the important role that National Meteorological and Hydrological Services have played—and continue to play—in providing early warnings ranging from short-term weather events to long-term climate variations and change. She forcefully highlights the important role that WCC-3 and its expected outcome, the Global Framework, can play in disaster risk reduction and recovery.

The need for climate change information at the regional-to-local scale is one of the central issues within the global change debate. Georgi, Jones and Asrar describe the status and plans for the Coordinated Regional climate Downscaling Experiment (CORDEX), which will help fulfil this need.

Ogallo and Oludhe describe how the provision of climate information through Regional Climate Outlooks Forums helps deal with ongoing climate variability and develop adaptation strategies in the Greater Horn of Africa. They point out the need for national monitoring and preparedness programmes that respond to specific local needs and the role that regional institutions play in making such information

available from regional to national level. They identify the challenges that need to be surmounted in order to face the increasing demand for climate information of all kinds and incorporate it in the decision-support systems and climate risk management practices in various socio-economic sectors.

Martínez and Mascarenhas provide a glimpse of the activities of the International Centre on El Niño research and how it provides climate information for climate risk management in western South America. It meets the climate-related needs of the various socio-economic sectors through climate system monitoring, predictions of critical climatic elements on monthly and seasonal timescales, including user liaison and practical applications, and services tailored to users' needs. The Centre also addresses the training of experts in the region.

Water is one of the major sectors through which climate variability and change manifest their impacts in different sectors of development. It is, therefore, important to understand the impacts of climate variability, particularly extreme events (floods and droughts), on the availability of water resources management plans to adapt to consequences of such events. Calver explores the interrelation of climate change, that is expected to

alter hydrological regimes, and the patterns of freshwater availability. She emphasizes the need to address present climate variability and identifies some associated research challenges.

Understanding land and water linkages under a changing climate is fundamental to livelihoods, food security and water-related ecosystem services. With intensifying competition for water resources, agriculture, inland fisheries and aquaculture are expected to be significantly impacted. Hideki discusses various aspects of food security under the new paradigm of climate change but stresses the need to give priority to present climate variability. He points to the need of addressing the problems faced by small land holders who are most vulnerable and the role that climate prediction can play in building their resilience.

Experience and expertise in designing effective adaptation strategies and implementing policies are still limited. It is important that the capacities be developed to make use of climate information in various sectors to be able to use this information in long-term planning and their day-to-day operation and thereby manage the risks of extreme climate through sharing such experiences. It is hoped that the articles in this issue will blaze a trail in sharing such experiences.