International Conference

"The Climate Change: a reality to be taken into account in the development trajectories: Modeling, Space Tool and Adaptation"
Algiers from 4 to 6 October 2015

RECOMMENDATIONS

Participants in the International Conference: "The Climate Change: a reality to be taken into account in the development trajectories: Modeling, Space Tool and Adaptation", organized in Algiers from Oct. 4 to 6, 2015, by the Algerian Space Agency (ASAL) with the support of the United Nations Office of Outer Space Affairs in Vienna, made the following recommendations:

- 1. Participants to the Conference recognized the important role of space data both for the refinement of climate models and climate monitoring, and in the analysis of vulnerability of territories or for the implementation of management strategies territories and resources taking into account the "climate change" issue. These data operate in interaction with the necessary field information which collection devices must be multiplied and increased in reliability.
- 2. They call for the initiation and strengthening of research and development project on both national and regional levels, based on the use of space data in adaptation strategies to climate change effects.
- 3. They call in particular the strengthening and multiplication of territories vulnerability analyzes, both in their natural component than socio-economic, as a basis for formulation of adaptation strategies, using among other space data.
- 4. Participants welcomed with satisfaction the availability of the Algerian Space Agency to cooperate in the framework of national, bilateral and multilateral level, by providing them high-resolution satellite data from Algerian satellites with an added value in terms of processing and analysis in the service of studies related to climate change issues.

- 5. Considering that some regions of the African continent constitute gaps in the global system of climate observation and the impact of its changes, they welcomed the availability of South African Space Agency (SANSA) to work, in collaboration with the Algerian Space Agency (ASAL), on reduction of the lack of data and studies on these regions.
- 6. Noting the existence of numerous initiatives in the field of the use of space data for climate change issues and in order to avoid duplication of efforts, participants recommended to the institutions and the scientific community in the region to take into account the developed projects and methodologies by various international institutions and organizations (Plan Bleu, FAO, ...)
- 7. They invite the Office for Outer Space Affairs of the United Nations to examine the possibilities for extending the functionality of its portal dedicated to UN SPIDER Programme (Platform for space-based Information for Disaster Management and Emergency Response), to the issue of climate change, particularly regarding methodologies and best practices for vulnerability analysis, adaptation strategies, risk management of climatic origin, the use of space data...
- 8. Capacity building and development of human resources are, in the opinion of all participants, a key element of efforts to take advantage of space observation means, available tools and developed methodologies. They call for the census of all existing opportunities, the development of national and regional cooperation (in particular in the framework of South-South cooperation) and scientific, technical and financial support to the organization of such initiatives in various forms (thematic workshops, academic training, ...).
- 9. Sharing of experiences and strengthening institutional links between national bodies of States in the region sharing the same concerns in the field of climate change constitutes a recurring demand from participants, in particular to promote the exchange of information on the mechanisms put in place for building data banks on existing studies, projects, legislation....
- 10. The organization and sharing of data was also considered essential in the understanding of these cross-sectoral and multidisciplinary problems, as the effort required to convert these data (including space data, very expensive in memory) in information more easily exploitable.

- 11. It was recognized essential networking of institutions dealing with issues of climate change and those dealing with satellite data, both at national and regional levels.
- 12. Agriculture and food security have constituted shared concerns by all participating countries in the region, because of their high exposure to the highest vulnerability to climate change impacts. On these themes, several recommendations were made:
- i. The issue of local and ancestral knowledge conveying respectful behavior towards soil, water, ecosystems and environment resources under climate variability contexts is greatly raised, and should be subject to priority interest in terms of preservation and dissemination.
- ii. Identification of land degradation area (with a view of stopping the processes and their inversion), potentially vulnerable sites to natural disasters, floods, droughts and for their protection, constitute a priority axis of efforts.
- iii. It is essential to promote and disseminate climate information to all actors (farmers, local authorities ...), in a form that is accessible to them, both from a perspective of awareness and operational use.
- iv. Similarly, these actors should be considered as potential providers of local information in a process of feedback or validation of space data.
- 13. The participants noted that despite having a limited liability even none in the current climate change, countries in the region are suffering and will suffer more from the effect imposing to them significant adaptation efforts, which will resort to both local knowledge and expertise, organizational mechanisms or advanced technologies which will have to be made with an an affordable cost.
- 14. In this regard, and noting the absence of African countries in the access to finance in the framework of the fight against the adverse effects of climate change, they call for strengthening capacities of formulation and project management.

- 15. Participants noted further that participation strategies to the global mitigation effort in the sense of reducing greenhouse gases can and should be adopted by countries of the region in the extent that they can induce virtuous practices of populations with respect to this question, as far as these strategies do not constitute barriers to the development of these countries.
- 16. Participants recognized the need to invest, preferably in a coordinated way with countries of similar climatic stress, critical health issues, energy efficiency, and use of renewable energy, preservation of natural resources and biodiversity and others, in relation with the effects of climate change.
- 17. Similarly, exploring issues of economic impacts, related in particular to the cost of inaction towards these changes and its financial implications should be considered.
- 18. The development of public-private partnerships has been recognized as essential, both for the promotion of climate services to citizens or services such as the development of index insurance by the use of space tools that allow the transfer of climate risks and other environmental and economic risks, especially from farmers.
- 19. In the context of awareness and training of citizens in climate change issues, participants called for introducing courses of environmental education and climate change, at the different levels: elementary school, secondary and university.
- 20. Participants called for the networking of climate actors, in appropriate forms (association ...) in order to promote a culture of climate risk management, drawing on the experience and expertise accumulated over generations and creating a consultation framework for all professionals as an opportunity for social solidarity actions.

Finally, participants were keen to express their appreciation and gratitude to the Algerian government for having successfully organized this conference, the content of the work and recommendations will certainly bring additional insights to the COP21, to be held in Paris in December 2015.