

World Meteorological Organization

XV-RA IV/Doc. 4.9

REGIONAL ASSOCIATION IV (NORTH AMERICA, CENTRAL AMERICA AND THE CARIBBEAN)

Submitted by: Secretary-General

Date: 23.III.2009

FIFTEENTH SESSION

Original Language: English

Nassau, Bahamas
24 April to 1 May 2009

Agenda Item: 4.9

**ENHANCED CAPABILITIES OF NMHSs IN DEVELOPING COUNTRIES,
PARTICULARLY LEAST DEVELOPED COUNTRIES, TO FULFILL THEIR
MANDATES**

SUMMARY

ISSUES TO BE DISCUSSED:

1. Development requirements and opportunities for NMHSs of developing country Members, particularly the Least Developed Countries (LDCs) and Small Island Developing States (SIDS)
2. Capacity Building through Strategic Partnerships and cooperation, basic infrastructure and human capacity development; and enhancing Resource Mobilization in the Region

ADDITIONAL FINANCIAL IMPLICATION:

None

DECISIONS/ACTIONS REQUIRED:

- (a) Adopt the draft text for inclusion in the general summary of XV-RA IV given in the Appendix to this document;
- (b) Request Members to continue assistance to Haiti through various mechanisms, including the available horizontal cooperation mechanism;
- (c) Request Members to participate actively with WMO in resource mobilization initiatives for the development of the NMHS of the region in particular LDCs and SIDS Members;
- (d) Request Members to provide to the Secretary-General the details of training seminars and workshops open to other Members by 1 September each year;
- (e) Request Members to advise the Secretary-General of opportunities to increase the number of WMO Fellowships or training opportunities offered to RA IV;
- (f) Request Members to complete the 2010 WMO Education and Training Questionnaire to enable a more complete identification of Members Training Needs and Capabilities to be identified for planning and reporting purposes.

REFERENCES:

1. *Abridged Final Report with Resolutions of the Fourteenth Session of Regional Association IV (Costa Rica)* (WMO-No. 987)
2. *Abridged Final Report with Resolutions of the Sixtieth Session of the Executive Council* (WMO-No. 1032)

CONTENT OF DOCUMENT:

Appendix for inclusion in the final report:

Draft text for inclusion in the general summary of XV-RA IV

Appendix for information:

XV-RA IV/Rep. 4.9: Progress/Activity Report

DRAFT TEXT FOR INCLUSION IN THE GENERAL SUMMARY OF XV-RA IV

4.9 ENHANCED CAPABILITIES OF NMHSS IN DEVELOPING COUNTRIES, PARTICULARLY LEAST DEVELOPED COUNTRIES, TO FULFILL THEIR MANDATES (*agenda item 4.9*)

4.9.1 The Association felt the restructuring of the WMO Secretariat that resulted in the establishment of the Development and Regional Activities Department (DRA) served to bring together key WMO Secretariat Offices responsible for working with Members at a regional level on NMHS development issues. The Association requested the Secretariat to continue to improve coordination between these Offices and their associated programmes as well as strengthening engagement with key partners and donors aimed at improving the capabilities of NMHSs in developing countries in the Region.

Strategic partnerships and development cooperation activities

4.9.2 The Association appreciated the strong partnerships between the WMO Education and Training Programme and the two Regional Training Centers (University of Costa Rica and Caribbean Institute of Meteorology and Hydrology) as well as the support from many Members in providing education and training opportunities for other Members within the Region. The Association commended the expert input into the ETR Programme through the EC Panel on Education and Training and the various Task Teams created by the Panel. Considering that the two RTCs had been reviewed in the last twelve months, the Association noted that EC would consider their reconfirmation as RTCs at its next session. The Association welcomed notification from the United States of America of the continuation of the US International Desk fellowship opportunities and the closer cooperation between the US and WMO in implementing these fellowships.

4.9.3 The Association agreed that the partnership established between WMO and the Spanish Agency for Meteorology (AEMET) in support to the development of Iberoamerican NMHSs in the Region had achieved significant results, noting in particular the organization of workshops on operation and maintenance of AWS; installation and training on the use of EUMETCast Reception Stations in the NMHSs of Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama; the regional workshop for NMHSs and the media organized in Santo Domingo, Dominican Republic in 2008; the training course on climate change - regional scenarios in Colombia in 2008; the pilot projects on socio-economic benefits of hydrometeorological information and services in Panama and Mexico, and the significant development projects for the NMHSs of Guatemala, El Salvador, Honduras, Costa Rica, Nicaragua, Dominican Republic, Haiti and Panama.

Enhancing Resource Mobilization for development support to the Region

4.9.4 The Association welcomed WMO's continued efforts to assist the NMHSs, and in particular the steps taken by the Secretary-General regarding the establishment of the Resource Mobilization Office (RMO), with the main focus to support the National Meteorological and Hydrological Services to enhance the level of in-country and external support, and funding to activities aimed at development of NMHSs to reach the levels of services needed to support the protection of life, property and food security, with particular emphasis on the developing countries, Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

4.9.5 The Association appreciated the progress made with the Inter-American Development Bank (IDB) in the areas of climate change and natural disasters, leading to the development of a cooperation programme with concrete activities in support to common Members in the Americas

Region, and also the discussions underway with Finland for Capacity Building support to NMHSs of the Great Caribbean in partnership with the Association of Caribbean States.

Human resource capacity and operational facilities development activities

4.9.6 The Association noted with appreciation the range and number of training activities (INF. 8) held since the last session and requested Members to provide the Education and Training Programme with updated information on the training events and opportunities by 1 September each year so they could be included in the WMO training plans and schedule for the following year. The Association thanked the Regional Rapporteur on Education and Training for her strong support and interest in representing the Members education and training needs within the WMO Education and Training Programme and the various regional forums.

4.9.7 Noting the ongoing need for fellowship opportunities in the development of staff and sustainability of many NMHSs, the Association requested Members to advise the Secretary-General of further opportunities to increase the number of WMO Fellowships or training opportunities offered to RA IV Members through either increased VCP contributions or in-kind contributions.

4.9.8 The Association noted the low response from RA IV to the 2006 Education and Training Programme Survey on "Members Training Requirements, Opportunities and Capabilities in Meteorology and Hydrology". With only six Members from RA IV completing the survey it was not possible to provide any reliable insight into overall Regional training needs or priorities, apart from noting the minimum qualifications of the aviation forecasting staff for five of the six respondents did not meet the current criteria outlined in WMO Publication 258 4th ed. The Association requested Members to complete the 2010 WMO Education and Training to enable a more complete identification of Member training needs and capabilities to be identified for planning, implementation and reporting purposes.

4.9.9 The Association gave its full support to the priorities related to the WMO scientific and technical programmes which focus on specific needs and requirements of the Region and new priority areas such as natural disasters prevention and mitigation, climate change and related environmental issues. The Association expressed its concern on the problem of human resources in the NMHSs which remains in spite of the efforts made; on the need for maintenance and further development of the existing basic observing networks, meteorological telecommunications and data-processing facilities in the Region; and for developing climate change scenarios in a regional context and on a short time-scale by NMHSs, in order to enable Members to provide relevant advice to their government policy-makers.

4.9.10 Noting the January 2008 meeting jointly organized by the Global Climate Observing System Secretariat (GCOS) and the Caribbean Community Climate Change Center (CCCCC) to consider how to implement the priority projects contained in the GCOS Regional Action Plan for Central American and the Caribbean (CAC), the Association expressed its appreciation to the two organizers in bringing together representatives of regional climate organizations, funding agencies, and countries with a commitment to improved climate observations in the CAC region and Mexico with the aim of securing resources for implementing the proposals contained in the Action Plan. The Association recommended implementation of the project proposals contained in the report of the meeting and also of actions designed to provide stronger leadership, enhanced coordination, and increased momentum for GCOS implementation in the Region. These actions include establishment of a regional coordination committee, development of terms of reference for a regional GCOS coordinator, appointment of such a coordinator if a source of funding can be identified, and the holding of an annual implementation coordination meeting. The Association appreciated the offer of the CCCCC to provide assistance in facilitating implementation of these actions and requested that actions be initiated as appropriate.

Specific Capacity Building projects for developing countries, particularly LDCs and SIDS

4.9.11 The Association was pleased with WMO support to NMHSs during the period from 2005 to 2008, assisting them in emergency situations as well as in the development of projects and NMHS development plans for the improvement of hydrometeorological observing networks and telecommunications and for the delivery of better services and information to the community.

4.9.12 The Association reaffirmed the important role of the Voluntary Cooperation Programme in the Region noting that six Member countries in RA IV received assistance from the WMO Voluntary Cooperation Programme aimed at facilitating their effective participation in the World Weather Watch and other scientific and technical programmes of WMO.

4.9.13 The Association acknowledged the efforts made to assist the development of the NMHSs of the Region making use of the various ongoing programmes and projects, in particular assistance to Haiti as the only LDC in the Region. The Association noted that WMO, through the VCP Programme, is assisting Haiti in the short term with two AWS, training on weather forecasting, computer equipment and telecommunications improvement and requested that the Region support the project proposal for Haiti and the Dominican Republic for the development of an Early Warning System and welcomed the interest of AECID (Spain) to facilitate its implementation.

4.9.14 The Association appreciated the response of the Secretary-General to the floods that impacted Haiti and the Dominican Republic in 2008, noting that a joint WMO/AEMET mission was organized to the Dominican Republic and Haiti (31 March-4 April 2008) to discuss with national authorities and funding agencies (AECID, IDB and UNDP) and that an Early Warning System Project Proposal, prepared under the framework of the Iberoamerican Programme of Cooperation is in the negotiation process with funding agencies and national institutions.

World Meteorological Organization

XV-RA IV/Rep. 4.9

**REGIONAL ASSOCIATION IV
(NORTH AMERICA, CENTRAL AMERICA
AND THE CARIBBEAN)**

Submitted by: Secretary-General

Date: 23.III.2009

FIFTEENTH SESSION

Nassau, Bahamas

24 April to 1 May 2009

Original Language: English

Agenda Item: 4.9

**ENHANCED CAPABILITIES OF NMHSs IN DEVELOPING COUNTRIES,
PARTICULARLY LEAST DEVELOPED COUNTRIES, TO FULFIL
THEIR MANDATES**

**PROGRESS/ACTIVITY REPORT
SUMMARY**

Reference: XV-RA IV/Doc. 4.9

CONTENT OF DOCUMENT:

Appendix:

- Progress/Activity Report

PROGRESS ACTIVITY REPORT

ENHANCED CAPABILITIES OF NMHSs IN DEVELOPING COUNTRIES, PARTICULARLY LEAST DEVELOPED COUNTRIES, TO FULFIL THEIR MANDATES

1. Measures were undertaken by the Secretary-General to effect structural and organizational changes in the Secretariat, especially with respect to the Department on Development and Regional Activities (DRA) with the view to improving delivery of services to Members and enhancing partnership with national and regional institutions and organizations. In that regard, this Department had been established, in order to ensure the smooth and efficient implementation of activities, within the framework of the Regional Programme and Technical Cooperation Programme.

Strategic partnerships and development cooperation activities

2. The role of regional partnerships in the development and delivery of education and training opportunities and resources for Members cannot be underestimated. The Regional Training Centers located at the University of Costa Rica and the Caribbean Institute of Meteorology and Hydrology play a key role in assisting in the identification and delivery of Member Training Needs and opportunities. Both Centers have been active in promoting the traditional face-to-face delivery of ab-initio courses, Continuing Education and Training Courses and through mechanisms such as the WMO Virtual Laboratory for Satellite Meteorology, online learning, discussions and tutorials. Both Centers have also been actively involved in assisting the WMO Education and Training Programme through participation in the WMO Executive Council Panel of Experts on Education and Training and its two Task Teams dealing with Aviation Forecaster Qualifications and options for formally accredited online learning courses.

3. Regional partnerships are also strong at the Member level with Members assisting each other by making high quality training resources such as that from the COMET organization in the USA available in English and Spanish, opening training courses to other Members, continuing support for secondment or Fellowship opportunities and support for online training such as the WMO Virtual Laboratory Weather Briefings.

4. As a result of the partnership established between WMO and the Spanish Agency for Meteorology (AEMET), the Conference of Directors of the Iberoamerican NMHSs and the Programme of Cooperation for Meteorology and Hydrology were established and are supported by the Government of Spain. The Conference of Directors of Iberoamerican NMHSs met four times during the period from 2005 to 2008 in Santa Cruz, Bolivia, Buenos Aires, Asuncion and Panama, respectively. Annual work plans were discussed and executed by WMO in collaboration with AEMET using a TF created for this purpose. Activities carried out in RA IV include among the most relevant: workshops on operation and maintenance of AWS in Panama and in El Salvador, installation and training on the use of EUMETCast Reception Stations in the NMHSs of Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama. During 2007 and 2008 missions were organized to Guatemala, El Salvador, Honduras, Costa Rica, Nicaragua, Dominican Republic, Haiti and Panama for the preparation of development projects for the NMHSs of these countries; workshop between NMHSs and the media organized in Santo Domingo, Dominican Republic in 2008; training course on climate change regional scenarios celebrated in Colombia in 2008; and pilot projects on socio-economic benefits of hydrometeorological information and services in Panama and Mexico, scheduled during 2009.

Basic Infrastructure and human resource capacity development activities

5. WMO assistance concerned the provision of fellowships and training opportunities for Members. The Region was actively involved in Fellowships with 41 people from 15 Members benefiting from Fellowship placements in the Region and elsewhere over the last four years. More than 50 fellows from other Regions have benefited by short term placements provided by Members within RA IV, particularly the USA.

6. Over the last four years Members have participated in a wide range of training opportunities funded through WMO, Members or other partners (see INF 3.xx for further information). The publication of the 4th edition of WMO Publication No. 258 "Guidelines for the Education and Training of Personnel in Meteorology and Operational Hydrology" in 2002 and its supplement No. 1 dealing specifically with aviation qualifications in 2006 has engaged the interest of many Members from this Region leading to their active participation in the work of the EC Panel of Experts on Education and Training Task Teams. The outcome from the first meeting of the EC Panel Task Team on Aviation Forecaster Qualifications (Exeter, UK, 9 to 13 February 2009) is expected to identify a path forward that maintains the thrust of the current generic structure but provides a robust and workable framework for setting and assessing the qualifications and competency of aviation forecasters. The Task Team is expected to recommend a way forward to EC-LXI.

7. The primary mechanism to assess the training needs of RA IV is through the four yearly survey carried out by the WMO Education and Training Office. The last survey was carried out in 2006 with only six of the 22 Members responding. Due to the small number of respondents it is not possible to reliably identify regional training needs. The most consistent information from the survey was that the minimum aviation forecaster qualifications of five of the six respondents did not meet the criteria laid down in WMO Publication No. 258 4th edition. The next survey is due in 2010 and all Members are encouraged to respond to the survey to allow better identification of the training needs of the Region. Once a more representative training needs analysis is developed it will be possible to seek better ways to coordinate training opportunities across projects, between partners and attract new or additional funding.

8. At the individual forecaster level it is clear from the ongoing interest and support for the WMO Virtual Laboratory and the associated Weather Briefings that existing staff are keen to enhance the education and training and willing to try new methods of delivery and participation. The WMO Education and Training (ETR) Office through their website are providing updated training information on the courses and training opportunities available to Members. Members are encouraged to advise the ETR Office of courses or training opportunities they are making available for other Members so the ETR Office can assist in disseminating the information and coordinating across other Offices within the Secretariat.

9. Updates of some of the GCOS Regional Action Plan projects are contained in the report of the January 2008 meeting, titled "GCOS Implementation in Central America, Mexico, and the Caribbean," which can be found on the GCOS Website at: <http://www.wmo.int/pages/prog/gcos/Publications/gcos-119.pdf>.

Enhancing the Resource Mobilization Strategy in the Region

10. The Association was informed on the establishment of the Resource Mobilization Office (RMO) in 2007. The main focus of the RMO is supporting the National Meteorological and Hydrological Services to enhance the level of in-country and external support and funding to activities aimed at development of NMHS to reach the levels of services needed to support the protection of life, property and food security, with particular emphasis on the developing countries, Least Developed Countries (LDCs) and Small Island Developing States (SIDS) and in keeping with

the Regional Strategic Plans and Strategic Development Plans. The main areas of focus include among others: VCP Programme, strategic partnerships, assistance to NMHS to find financing opportunities at national level, demonstration of socio-economic benefits of NMHS products and services and advocacy and marketing (WMO and NMHS).

11. Development projects for the NMHSs of Panama, Costa Rica, and El Salvador, prepared during 2008 under the Programme of Cooperation for Iberoamerican NMHSs were submitted for consideration to national and international funding agencies based in these countries. Panama would support its own project, while the project in El Salvador will be supported using funds from a FAO project that addresses the same subject and complemented by national funds. Development projects were also prepared for the NMHS of Honduras and Nicaragua. A mission is being organized to these countries in the first half of 2009 seeking support for the projects. The Inter-American Development Bank (IDB) has offered support to the project in Honduras.

12. Discussions have been held with AECID (Spain) in Madrid and in Haiti, Dominican Republic and Costa Rica with national representatives who have expressed interest in supporting development projects that have been prepared for the NMHSs of these countries under the Iberoamerican Cooperation Programme funded by the Government of Spain.

13. On going discussions with Inter-American Development Bank (IDB) representatives in the areas of climate change and natural disasters, and climate and water are leading to the development of a cooperation programme with concrete activities in support to common Members in the Americas Region.

14. Discussions are underway with Finland for Capacity Building support to NMHSs of the Great Caribbean in partnership with the Association of Caribbean States.

Specific Capacity Building projects for developing countries, particularly LDCs and SIDS

15. During the period from 2005 to 2008, WMO continued providing assistance to NMHSs through the VCP Programme. A total of six VCP projects were supported benefiting six countries, namely, Bahamas, Colombia, Costa Rica, El Salvador, Guatemala and Haiti. VCP Projects aimed at supporting the improvement and enhancement of NMHSs in RA IV covered the following areas: GTS communications, rehabilitation of observing network, improving upper-air systems hydrological forecasting, and climate database management systems.

16. In response to the floods that have impacted Haiti and the Dominican Republic in the last years, a joint WMO/AEMET mission that was organized to the Dominican Republic and Haiti (31 March-4 April 2008) to discuss with national authorities and funding agencies based in the Dominican Republic and Haiti, (AECID, IDB and UNDP), an Early Warning System Project Proposal, prepared under the framework of the Iberoamerican Programme of Cooperation. The Project received support by national institutions in both countries. The representative of AECID in the Dominican Republic expressed interest in providing financial support for the implementation of the project, included in the priority areas by AECID and the Governments concerned. The Project components include the establishment of an EWS to be shared by the Dominican Republic and Haiti, the development of a common hydrometeorological database, improvement of telecommunications and observing meteorological networks, as well as training of professional and technical staff.

17. The initiative of the Ibero-American Climate Project (CLIBER) to support the development of eight NMHSs of RA IV is being developed under the AEMET (Spain)/WMO Programme of Cooperation on Meteorology and Hydrology for NMHSs of Iberoamerican countries. The objective of the CLIBER Project is to contribute to social and economic development by strengthening the capacity of NMHSs of participating countries to provide improved services and information in

particular to disaster risk reduction and climate change. Project Components vary depending on particular needs of participating countries, however in most cases they include: (i) improvement of observing hydrometeorological networks; (ii) strengthening of telecommunications; (iii) development of hydrometeorological databases and information systems; (iv) improvement of Early Warning Systems; and (v) institutional strengthening (training, partnerships development).

18. Results were achieved on the pilot project on Automated Weather Service Production System for the Caribbean Area using the capacity created by the SIDS - Caribbean Project in the Region. The pilot project was implemented in Jamaica and Trinidad and Tobago in 2006 contributing to the sustainability, visibility and development of these Meteorological Services and allowing the establishment of partnerships with public and private sectors for the provision of improved information and services.

19. From April 2005 to March 2009, ten (10) Small Island Developing States benefited from the WMO Fellowship Programme: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Jamaica, Saint Lucia and Trinidad and Tobago.
