Simet

Conferencia de Directores de los Servicios Meteorológicos e Hidrológicos Iberoamericanos



Conference of Directors of the West African National Meteorological and Hydrological Services

WMO RA VI

RCC-Network

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Contac

BARCELONA DUST FORECAST CENTER





Barcelona Supercomputing Conter



WMO RAI 🎎 🌄 🥭 🍘 🔿

About

AEMet

Events

Mediterranean Climate Outlook Forum

Links

AEMET International Meteorological Cooperation

Dr. Jorge Tamayo Carmona

AEMET Cooperation Programs

- Ibero-American cooperation program. CIMHET
- West-African cooperation program. AFRIMET • SDS-WAS/BDFC
- SDS-Africa/GAW Sahara
- MedCOF
- **ACMAD** support
- CIIFEN support











MINISTERIO PARA LA TRANSICIÓN ECOLÓGICA

GOBIERNO

AEMET International Cooperation



MINISTERIO PARA LA TRANSICIÓN ECOLÓGIO

Arenaia Estatal da Mataarala

- Within the framework of the Spanish Cooperation Master Plan
- Development Cooperation Programs with more tan 25% of WMO members
- Strategic lines designed, approved and implemented by members.
- Active role of WMO. Four trust funds: ACMAD, AFRIMET, CIIFEN and CIMHET
- Regionally oriented
- Oriented to users needs
- Mainly focused in Ibero America, West Africa and Greater
- Mediterranean Region ------





	PROGRAMA	FECHA DE INICIO	APORTACIÓN TOTAL (€)
	ACMAD	1999	710.887
	CIIFEN	2005	548.047
	CIMHET	2006	3.695.820
-	AFRIMET	2007	3.280.000
4	TOTAL		8.234.754

AFRIMET



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West African National

• From 2007, in collaboration with WMO

- Main projects closely alligned with GFCS
 - Health: HEALTHMET. Creation of links with health authorities
 - Agriculture and food production: METAGRI. Promotion to climate information by farmes for decison making. 7.800 farmers trained in 160 roving seminars. Increase in crop yield around 30%
 - Coastal waters forecast: MARINEMET.
 Improvement of coastal waters forecast in
 W Africa. 10 AWS, 6 Tide Gauges



Meteorological and Hydrological Services

The Iberoamerican cooperation in meteorology



· AEMe

 Iberoamerican NMHSs highlighted the importance of cooperation to achieve its goals, taking advantage of common language and cultural heritage

Governing body:

- Conference of the Iberoamerican Directors of NMHSs (CIMHET)
- Planning instrument:
 Iberoamerican Meteorological
 Cooperation Program
- Funding mechanism:
 - Trust fund established by Spain in



CIMHET





- Working and cooperation structure, with annual meetings, aimed to improve institutional and operative capacities and to share experiences
- Reactivated in 2003
- Design, approval and implementation of action plans
- Active role of WMO
- Permanent Secretariat in AEMET

Dimet

Open to Associated NMHS



Iberoamerican Meterological Cooperation Program



- Oriented to national or regional needs
- Cooperation and synergies with regional institutions and similar networks
- Strategic lines
 - Institutional reinforcement and resource mobilisation
 - Provision of weather, climate and hydrological services

Capacity development





Institutional reinforcement and resource mobilization



- Increase visibility of IMHSs and CIMHET
- Fostering a higher institutional presence of IMHSs
- Promotion of cooperation with similar networks: CODIA **RIOCC**, Ibero-American Civil Defense...
- Increased cooperation with other Members and similar associations beyond CIMHET area
- Design of projects to modernize the IMHSs and support to their implementation, based on national socioeconomic needs
- Pilot projects on the socio-economic benefits of meteorological information (agriculture, fisheries, health, transport)
- Promotion of regional and subregional integration Resource mobilization to project implementation

Provision of services



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- Support to the implementation of virtual warning and forecast centers
- Regional observation networks
- Development of a system to manage climatological, meteorological and hydrological databases (MCH)
- Support for the development and implementation of regional climate centers
- Support for regional climate forums
- Support for river flood and drought management programs
- Development of regionalized climate change scenarios



Central America lightning detection network

- Implementation of a regional lightning detection network to support watching of thunderstorms by NMHS
 Agreement by all NMHS concerned for use and
- exploitation
- Compoment of Central America Virtual Centre for Severe Hydrometeorolgical events
- Include current systems (Honduras)



Regionalized climatic change scenarios for Central America

- Strengthening the role of NMHSs in climate change
- Provide information to different sectors
- Regional project
 - Data rescue if necessary
 - Common methodology
 - Regional climate change scenarios by downscaling of 20 AR5 global models
 - Regional working group with SMHN experts
 - Web visor hosted by CRRH-SICA
- Involvement of other networks (users) such as CODIA and RIOCC
- Funded by EUROCLIMA+ from UE









Capacity development



Support for professional training
AECID support

- More than 1.000 students in more than 60 courses with more than 3.000 hours.
 - Technical training and qualification of personnel
 - Management of the INMHSs
 - Promotion of horizontal cooperation
- AEMET, approved like new RTC of WMO in Spain, mainly for Ibero America support





Courses held

- 14 Satellite meteorology
- 10 Numerical models.
- 10 Use and maintenance AWS's (roving)
- 3 Managing AWS's networks
- 1 Meteorological Radar Applications
- 5 Generation of scenarios of regionalized climate change.
- 2 National drought policies and their effects
- I Drought monitoring and forecast
- 3 Seasonal forecast
- 1 Agrometeorology
- 2 Climate data management
- 1 Coastal Floods
- 2 Air quality
- 1 Hydrological forecast
- 1 Instructors in integrated flood management
 - 3 Strategic management of INMHS. On line
 - 2 Training of meteorologists according to WMO BIP-M. Blended



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Courses planned 2018-19



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- Drought monitoring and forecasting
 Meterological Radar applications
- Satellite meteorology for Tropical Areas
- Satellite meteorology for Mid
 Latitudes
 - Air quality observation and forecast
 - Applications of ECMWF model in tropical zones
 - Regionalized climate change scenarios
 - Marine meteorology
 - Meteorological services management







Some sucess experiencies



MINISTERIO PARA LA TRANSICIÓN ECOLÓGIO

- Conference members establish priorities and activities
- Dialogue with users. Projects oriented to users needs
- All Ibero American NMHS included in CIMHET. Increased collaboration
- -among NMHS
- +•+WMO involvement
 - AECID support for training program
 - Creation and approval of a Spain WMO RTC in AEMET
 - Development of a free data base management system (MCH). Donated to WMO
 - Capability to working with many different stakeholders
 - Collaboration with other regional sectorial networks (CODIA, RIOCC). Join meetings to define join projects
 - Regionally oriented. Resources optimization.
- Access to funds of EU programs (LAIF, EUROCLIMA+)
- $+ \bullet +$ Common positions and coordinated actions in global and regional fora
- Regional observation systems development
- $+ \bullet + Regional common systems for climate change scenarios generation + +$

Some problems





- Lack of technical staff in NMHS
- Lack of sustainability (maintenance) of implemented systems
- Lack of capacity of NMHS to present initiatives to funds
- Lack of staff for projects implementation
- Lack of political relevance and institutional representation in many NMHS
- Discontinuity in activities by NMHS to implement projects
- Discontinuities due to changes in management teams
- Duplication and lack of coordination of projects and activities with other institutions

Challenges





- Increase coordination with other cooperation inititatives
- Increase collaboration with similar networks of other geographical areas
- Desing and development of join projects with other sectorial networks
- **Projects** implementation
- Sustainability of implemented observation networks
- Increase NMHS and networks visibility in funding mechanisms
 - Increase NMHS presence in national policies
- Have work teams to draft projects and find funding for implementation
- Ensure financial sustainability of the programa in the + medium and long term

THANKS FOR YOUR ATTENTION

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