

WORLD METEOROLOGICAL ORGANIZATION

IPM/2013/Doc. 2

INFORMAL PLANNING MEETING
VOLUNTARY COOPERATION PROGRAMME

ITEM 2.1

Original: ENGLISH

WILLEMSTAD, CURACAO
19 - 20 APRIL 2013

VCP AND VCP COORDINATED ACTIVITIES 2012

(Submitted by the Secretary-General)

Summary and Purpose of Document

This document provides information on Voluntary Cooperation Programme Activities during 2012 including VCP Coordinated Programmes.

ACTION PROPOSED

The meeting is invited to consider the information on VCP Activities during 2012 including VCP Coordinated Programmes as a guide to donor members in planning their support to VCP during 2013 and their technical assistance programmes more broadly.

1. Management of the Voluntary Cooperation Programme

1.1 VCP Management Activities in 2012 focused on:

- Enhancing the visibility of capacity development and VCP Programme, and ensuring the cost-effective and efficient management of the VCP Programme and the timely distribution of the relevant information to Members;
- More rapid response to VCP Members' requests for assistance using the VCP(F), the Emergency Fund or through the VCP Coordinated Programme;
- Retirement and / or supporting outstanding VCP requests;
- Strengthening working relationship with Scientific Departments and Regional Offices for support of VCP projects;
- Securing additional human resources support for RMO and VCP Programmes.
- Resourcing the Fellowship Fund

1.2 Report of the 2012 Informal Planning Meeting on the VCP and related Technical Cooperation and the Development Partners Round Table

The 2012 Informal Planning Meeting (IPM) on the Voluntary Co-operation Programme (VCP) and related Technical Co-operation Programmes met in Mexico City, Mexico from 6 to 7 March 2012 under the chairmanship of Mr Jaakko Nuottokari (Finland). The meeting was attended by representatives of Argentina, Canada, China, Finland, Germany, Japan, Korea, Mexico, New Zealand, Spain, United Kingdom and USA. During the Development Partners Round Table, the meeting was also attended by representatives of ICAO, IDB, CIMH and World Bank.

The meeting centred on cooperation activities between NMHSs and their National Official Development Aid agencies to support hydrometeorological development projects in developing and least developed countries. Various Members shared their experience, best practices and lessons learnt. The meeting noted that the NMHSs have very different type of relationships with their respective national aid agencies, but in general more advocacy and closer cooperation with the national institutions is needed. Also, there is greater need for neutral and objective evaluations of the development projects and their impact. report of the meeting at http://www.wmo.int/pages/prog/dra/vcp/documents/IPM_2012_DRAFT_Report_26052012.pdf

2. WMO Voluntary Cooperation Programme – Activities supported

In 2012, the VCP Secretariat received new requests for support from Armenia, Belarus, Cuba, Fiji, Ghana, Guyana, Kiribati, Mauritania, Moldova, Samoa, Sudan, Tajikistan, Uganda, Vanuatu and Zimbabwe. A total of **30 new project requests** were received throughout the year (Appendix 1) including 9 through the GCOS Secretariat. Ten were supported through the VCP-F as they fitted within the VCP-F guidelines. The remaining 20 were posted to the web and circulated among the potential donors and IPM members through VCP (ES) Coordinated process. Of these **16 projects** were supported with additional support from GCOS. In total 80% of all new requests were supported. Countries that received support included: Angola, Belarus, Cuba, Fiji, Madagascar, Maldives, Mexico, Moldova, Sudan, Tajikistan, Tanzania, Vanuatu and Zambia. For an overview of on-going projects, outstanding requests and links to partners and donors, please check our website at <http://www.wmo.int/pages/prog/dra/vcp/on-going.php>

2.1 VCP (F) Supported Activities

A wide range of activities were supported through the **VCP-F** in 2012 including:

Expert Missions and services

- Expert mission to Kiribati to update the Meteorological Service Strategic Plan 2012 – 2018
- Expert Mission to Samoa to conduct QMS training, 24-28 September

- Expert services for Drafting of Meteorology Bill for the Kingdom of Tonga
- Expert mission to Fiji to support training workshop on Meteorological equipment and instruments maintenance, Calibration and repair (with JICA)
- Fact-finding mission to the State Hydrometeorological Administration Pyongyang, DPRK
- Expert mission in Seychelles for the installation of Automatic Weather Stations
- Expert Mission in Suriname to diagnose a EEC Weather Radar (Type WR100-5), Suriname, 14-18 February 2011

Training (see also 2.8)

- Financial assistance to attend the WMO (SDS-WAS) hands-on training workshop on dust modelling, Belgrade, Serbia
- International Training course on “Climatology, a step towards climate services”, Toulouse France 11-12 June 2012
- Financial assistance to attend the Steering Group- SWFDP project, Geneva , Switzerland
- Financial assistance to attend Workshop on Aeronautical meteorology on east and central Africa, Ethiopia, 8-12 October

Support to CDMS and Climatological Activities

- LoA with Meteo-France- WMO`s contribution to implementation of Project on rescue of climatological data in Madagascar including rehabilitation of the CliSys system.

VCP Equipment

- Financial support towards the “Provision of Hg barometers to Latin American and Caribbean NHMSs (Letter of Agreement between WMO and the DWD)
- Financial support towards infrastructure procurement and activities for the “ Transformation from WAFS Satellite to WAFS Internet Reception”
- Financial support to purchase the hydrometeorological thermometers for the Republic of Armenia

Public Weather Service

- Support to reinforcing the equipment of Mauritania National Meteorological Office for the publication on meteorological bulletins on Mauritania TV
- Upgrading and strengthening of the Public Weather Services presentation NMA, Ethiopia

Project Development

- Expert mission to Mauritania, 16-20 September, 2012 to develop full proposal for Climate Investment Fund

2.2 VCP- F Expenditure for 2012

Full details on VCP-F expenditure for 2012 are provided in **Appendix 2** and summarized in **Table 1** below. **Table 2** indicates expenditure trends over the period 2008 to 2012.

Table 1 - VCP (F) Activities Supported in 2012 (incl. requisitions)		USD
1	Expert services	52,541
2	Fellowships & Training activities	105,474
3	Equipment and software	52,908
4	Project Development	2,422
5	Support to CDMS and CLIMATALOGICAL Activities	7,485
6	TV Promotion and Distribution	42,495

	TOTAL	263,325
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Table - 2 VCP(F) Expenditure 2008-2012 (USD)						
	Activity Area	2008	2009	2010	2011	2012
	Project Development Activities		34,648	4,236		2,422
	VCP spares/shipping/equipment	147,267	281,782	64,255	39,076	52,908
	Expert services	16,528	33,342	52,407	61,819	52,541
	Short-term fellowships	106,570	133,530	62,928	94,930	92,097
	Group Training Activities	20,999			27,775	
	TCDC activities					
	Improvement of GTS					
	Improvement of GTS Asia/Pacific					
	Improvement of GTS Africa					
	Improvement of GTS South America					
	Improvement of GTS South-East RA VI					
	Improvement of GTS Central & Eastern Euro	3,238				
	Improvement of upper-air observing systems	28,688				
	Upper-air stations & GCOS		18,851			
	Improvement of GDPS					
	Agricultural meteorology activities					
	Support to CLICOM & climatological activities	4,490	38,472	62,774		7,485
	Mitigation of natural disasters					
	Emergency disaster assistance			218,741		
	ACMAD					
	EAMAC					
	Operational hydrology activities					
	Improvement of satellite reception					
	Internet capabilities	13,916	6,257	11,815	9,763	
	Long-term fellowships			4,233	29,948	13,377
	Support to LDCs					
	Public Weather Services			25,276		42,495
	Training activities by ETR					
	VCP Management		17,288	29,006	10,979	
	Total	341,696	564,173	535,671	274,290	263,325

2.3 VCP (ES) Coordinated

In 2012, **4 donor Members** offered equipment and / or expert services within the framework of the VCP Equipment and Services Programme (VCP-ES) including for outstanding requests carried over from previous years. **16 projects** were supported in 2012 (Table 3) with additional support from GCOS.

Similar to 2011, project requests were mainly aimed at strengthening surface observing stations, strengthening communications systems, and improving meteorological applications. Some

requests concerning TV weather presentation and expert services for legislative purposes were also received. Additionally, a few requests were received for upgrading of database software and climate data processing systems.

At the end of 2012 **10 VCP requests remained unmet** in the system (including 6 requests from 2011).

Table 3 - VCP Coordinated Projects supported in 2012

Members support				
	Requesting Country	Focus	Supporting country	Amount (estimates)
1	Angola	Instruments for 8 GSN stations	KNMI(Netherlands) (GCOS)	CHF 19,979.71
2	Armenia	Shipping of instruments for 4 GSN stations to Armenia	(GCOS)	CHF 20,585.05
3	Armenia	Supply of 500 radiosondes closed	Japan (GCOS)	CHF 51,330.38
4	Armenia	The installation of the CLIWARE climate data processing system	Russia	USD 5,000
5	Belarus	Delivery of technical equipment and software of the combined technology MITRA-GIS Meteo	Russia	USD 25, 812
6	Democratic Republic of Congo	Fixing of microwave radio-link including lightning protection	(GCOS)	CHF 140,785.12
7	Ethiopia	Upgrading and strengthening of the Public Weather Services presentation on NMA, Ethiopia	UK	CHF19,208
8	Madagascar	Renovation of 11 GSN stations in Madagascar	KNMI (Netherlands) (GCOS)	CHF 25,000
9	Maldives	Supply of 800 radiosondes (Eur 65,000.00) + 800 balloons (US\$ 5,200.00)	(GCOS)	CHF 83,216.74
10	Mauritania	Provision of a TV weather presentation system	UK	CHF 23,287
11	Mexico	GCOS support to acquisition of radiosondes for stations in Mexico in 2012	(GCOS)	CHF 209,749
12	Moldova	The installation of the CLIWARE climate data processing system	Russia	USD 5,000
13	Sudan	Supply of 400 radiosondes (no GUAN Stations)	Japan (GCOS)	USD 43,085.21
14	Tajikistan	The installation of the CLIWARE climate data processing system	Russia	USD 5,000
15	Tanzania	Supply of radiosondes	Japan (GCOS)	USD 40,000
16	Zambia	Automatic Message Switching System (AMSS) for use as Global Telecommunications System (GTS)	KNMI (Netherlands (GCOS)	CHF 63,150.32

2.4 Emergency Assistance (in combination with Emergency Assistance Fund)

Table 4 – Emergency Assistance activities supported during 2012		
Country	Description	Donor
Haiti	Expert mission	VCP Emergency Assistance Fund
Fiji	Emergency Disaster Assistance.	VCP Emergency Assistance Fund

2.5 Members Related Technical Cooperation Activities

See IPM/2013/Doc. 3 for a full inventory of Members bi-lateral cooperation activities.

Key Highlights include:

- Spain continued to finance the activities of the “Program of Cooperation for Ibero American NMHSs” and the activities of “West Africa Cooperation Program”.
- Canada provided funding for a multi-year project in Haiti which aims for the rehabilitation of all aspects of the Met Services for immediate benefit to the population, establishment of sustainable infrastructure and the establishment of robust information dissemination mechanisms based on sound observations and good service delivery.
- Canada also provided additional funding to support the GFCS Secretariat and also funds a GFCS Implementation Project across several Regions.
- Korea Meteorological Administration signed a Memorandum of Understanding with the WMO related to the provision of a World Calibration Centre (WCC) for Sulphur Hexafluoride (SF6) to the WMO Global Atmosphere Watch (GAW) programme and has also established a GFCS Trust Fund.
- Japan continues to operate a trust fund for Global Frameworks in order to facilitate the financial contribution of JMA to a broad range of WMO programmes and projects that support the establishment, implementation and strengthening of all components of the Global Framework for Climate Services, including disaster prevention, agriculture, and water resource management in the world.
- Norway GFCS for Africa programme continues and a new GFCS Partnership Project with WFP and WHO is under development. Support for the GFCS Partnership Project was launched by the Minister of International Development in February 2013, a total of about 10 million USD (60 mill NOK) over 3 years to a partnership program, including WFP, WHO, CGIAR and RCCC in addition to WMO, who we have asked to take a coordinating role. The program will focus on Africa, and three of the prioritized GFCS areas; health, food/nutrition security and Disaster Risk Reduction. World Bank involvement in this programme has been discussed, but is still under consideration.
- The AMCOMET¹ African Strategy for Meteorology – Weather and Climate Services has been included in the TICAD (Japan-Africa Development) Action Plan 2012-2017 and will be eligible for funding.

¹ African Council of Ministers for Meteorology

- USA also operates an individual VCP Trust Fund that supports a range of Technical Cooperation Activities through WMO technical Departments and direct assistance to countries. USAID-OFDA Disaster Risk Management Programme continues.

2.6 WMO Voluntary Cooperation Programme – 2012 Financial Contributions

The total Members' contributions to the WMO Voluntary Co-operation Programme in 2012 are shown in **Table 5** in terms of VCP (ES) and VCP (F) and reported bi-lateral support.

In 2012, 6 Members (Australia, China, Japan, Korea, Maldives and Mauritius) made cash contributions to the VCP Fund (VCP(F)), amounting to approximately **USD 144,696** while **USD 2,162,821** and equivalent support was provided to VCP Coordinated Projects through WMO and some **USD 28,829,089** equivalent through bi-lateral arrangements for a total investment of **USD 31,136,606**². Reported bi-lateral figures are of course very indicative. There are some difficulties with representing "Reported" figures and it is likely that not all IPM members have reported similar activities under this section.

Member	VCP(F)	VCP(ES) Equipment and Services through WMO	Bi-Lateral As Reported		Total
			Equip & Services	Fellowships & Training	
Argentina				8,300	8,300
Australia	52,022		5,416,978		5,469,000
Canada			3,755,000	642,500	4,397,500
China	10,000	145,000	228,000	1,458,511	1,831,512
Hong Kong				30,800	30,800
Finland		263,750	1,859,925		2,123,675
France			1,479,756	606,244	2,086,000
Germany		38,700	2,799,960	514,840	3,353,500
Indonesia				70,945	70,945
Japan	50,000	524,472	unknown		547,424
Maldives	1,000				1,000
Mauritius	1,674				1,674
Netherlands		133,000			133,000
New Zealand			333,000		333,000
Norway			2,500,000		2,500,000
Republic of Korea	30,000	335,000	1,320,094		1,685,094
Russia		25,812	unknown		25,812
Spain			300,000		300,000
Switzerland			2,393,200		2,393,200
UK			1,718,126		1,718,126
USA		697,087	1,392,910		2,090,000
Total	144,696	2,162,821	28,829,089		31,136,606

² This does not represent full value of WMO inter-member cooperation support but only as reported to WMO Secretariat by members-

2.7 Trends in Contributions to WMO VCP Programme

The trends in contributions to VCP (F) over the past six years indicate a fairly constant support of the VCP(F) and of VCP ES through the WMO (Table 6). This is illustrated below in Figure 1.

Overall in any given year, four to five countries account for over 90% of the VCP-Funds contribution as illustrated in Table 6 below. This poses the risk of over reliance on a small number of donors, which may impact on overall delivery objectives for VCP. An increased participation from other countries to diversify the base of the programme is highly desirable.

However, this is compensated to an extent by the very positive move towards support by members for major development programmes and a generally increasing trend in other technical cooperation trust funds. WMO overall voluntary contributions (extra-budgetary funding) for 2012 was 43.5M CHF received by WMO equalling some 42 % of total annual budget. In addition some 23,398 M CHF in concrete pledges (Norway, Canada and others) are also in the system

Figure 1. Contributions to VCP (F&ES) 2007 – 2012

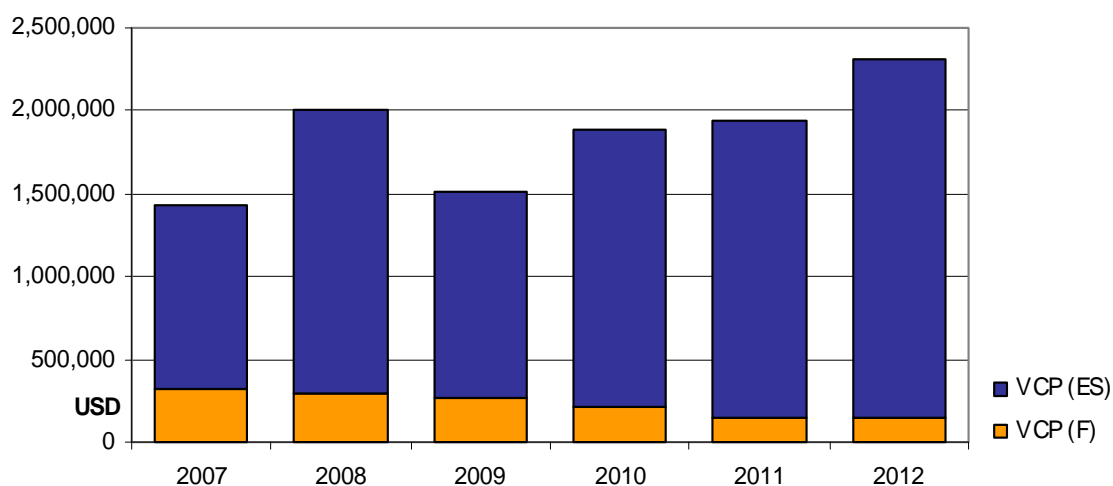


Figure 2. Total investment (VCP (F&ES) and bilateral activities) 2007 - 2012

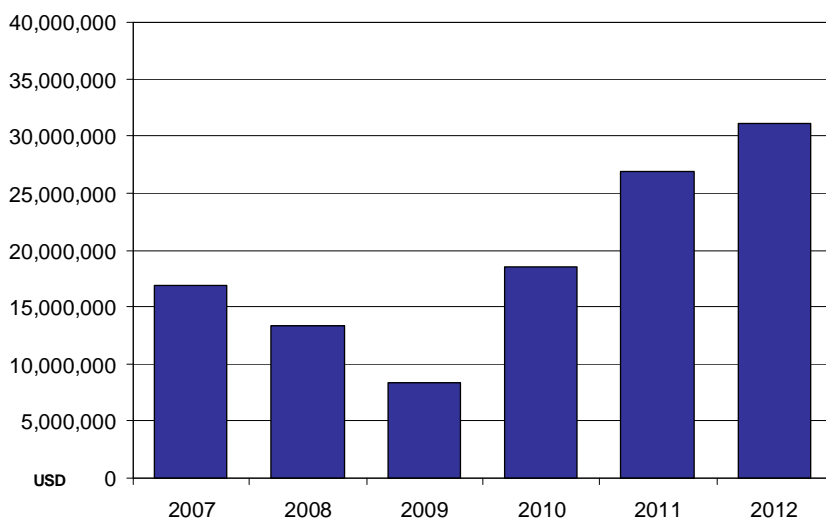


Table 6 - VCP-F and VCP Financing 2007 to 2012

Donor Member	2012			2011			2010			2009			2008		
	VCP(F)	VCP(ES) Equipment & Services through WMO	Total	VCP(F)	VCP(ES) Equipment & Services through WMO	Total	VCP(F)	VCP(ES) Equipment & Services through WMO	Total	VCP(F)	VCP(ES) Equipment & Services through WMO	Total	VCP(F)	VCP(ES) Equipment & Services through WMO	Total
Australia	52,022		51,774	51,774		51,774	41,731		41,731	50,000	147,700	197,700	50,000	87,000	137,000
China	10,000.00	145,000	155,000	10,000	107,754	117,754	10,000	27,000	37,000	10,000		10,000	37,000	47,148	20,000
Finland		263,750	263,750		150,000	150,000					7,343	7,343			
France											4,479	4,479			
Germany		38,700	38,700		40,800	40,800									
Ireland										9,555		9,555	8,760		8,760
Italy															
Japan	50,000	524,472	574,472	54,230	608,663	662,893	128,000	514,300	642,300	91,000	105,000	196,000	106,000	22,000	128,000
Kenya															
Kingdom of Saudi Arabia														13,579	13,579
Maldives	1,000		1,000	1,000		1,000	1,000		1,000	10,000		10,000	1,000		1,000
Mauritius	1,674		1,674	1,674		1,674	1,537		1,537	1,460		1,460	2,685		2,685
Myanmar							486		486				972		972
Netherlands		133,000	133,000		270,000	270,000		133,620	133,620						
Norway										70,000		70,000	54,852		54,852
Pakistan													978		978
Republic of Korea	30,000	335,000	30,000	30,000		30,000	30,000		30,000	27,700		27,700	27,500		27,500
Russian Federation		25,812	25,812					40,000	40,000					10,000	10,000
Spain								53,448	53,448		243,500	243,500		443,312	443,312
Switzerland					200,000	200,000		53,448	53,448		9,734	9,734			
UK								38,701	38,701		71,000	71,000			
USA		697,087	697,087		410,867	410,867		812,606	812,606		654,912	654,912		1,096,180	1,096,180
Total	144,696	2,162,821	1,972,268	148,678	1,788,084	1,936,762	212,754	1,673,123	1,885,877	269,715	1,243,668	1,513,383	289,747	1,719,219	1,944,818

2.8 Education and Training Fellowship Activities

2.8.1 Training

VCP(F) funds continue to be used to support very short-term training activities offered by WMO RTCs and Member countries in areas such as WMO Information System (WIS), tropical cyclones, agricultural meteorology, aeronautical meteorology, climate analysis and applications, numerical weather prediction, weather modification, and climate prediction. In 2012, 42 participants from 32 countries were supported to attend 14 courses and workshops; and USD 71,398 was used.

Table 7: Training events and participants supported using the VCP(F) in 2012

Event Title	Countries Supported	Nr. of Participants	VCP (F) (USD)
International Training Seminar on "Methods for Short-term Climate Prediction", Nanjing, Beijing, China, 26 March to 7 April 2012	Uzbekistan	1	1429
Operational Aeronautical Meteorology, Uni. La Molina, WMO RTC, Lima, Peru, 23-27 April 2012	Dominica	1	1971
International Training Course on "Radar Meteorology", to be held from 11 to 22 June 2012, in the RTC Nanjing, China.	Kenya, Sierra Leone, Kenya, Uzbekistan, Congo, Zimbabwe, Moldova, Egypt, Mali	9	18033
Intl School on Data Assimilation (EISDA 2012), Seoul, Rep. of Korea, 22-24 Aug 2012	Viet Nam, Malaysia	2	3189
Intl Training Course on Nowcasting, Beijing, China, 3-14 Sept 2012	Tajikistan, Tanzania, Philippines, Seychelles, USA	5	7511
Intl Training Course on Reg. Climate Prediction & Drought Monitoring & Warning, Beijing, 17-27 Sept 2012	Tajikistan, Hungary, Central African Rep, Burundi, Indonesia	5	7726
6th International Training Course on Weather radars, 8-12 October 2012, Marmaris, Muglia, Turkey	Uzbekistan, Burkina Faso, Hungary	2	4611
ECMWF Training Course use and interpretation of ECMW products in national meteorological and hydrological services, Course code OP_WMO, 8-12 October 2012, UK, Reading	Indonesia	1	1500
6th Intl Training Course on Télécommunication météorologique et le système d'information de l'OMM, Antalya, Turkey, 1-6 Oct 2012	Czech Republic, Germany, Congo	3	3280
3rd International Training Course on "Upper Air Observing Systems", Istanbul, Turkey, 15-19 October 2012	Hungary	1	500
International Training Course on "Application of Meteorological Satellites in Disaster Mitigation and Environmental Studies, 22 Oct. - 2 Nov. 2012, Beijing, China	Tajikistan, Kenya, Philippines Tanzania, Madagascar	4	7199
Workshop on Competence Assessment of Aviation Forecasters and Observers, Israel, 29 October to 2 November 2012	Papua New Guinea, Senegal, Thailand, Myanmar, Paraguay	5	11983
International Training Course on "Prévisions météorologiques dans les régions des latitudes moyennes, 13 -23 Novembre 2012, Toulouse, France	DR Congo	2	2149
International Training Workshop on Implementing Competency Assessment for Aeronautical Meteorological Personnel, 5-9 December 2011, Hong Kong, China	Solomon Islands	1	317
TOTAL		42	71398

NMHSs in Hong Kong China, the Islamic Republic of Iran, the People's Republic of China, Turkey, the United Kingdom of Great Britain and Northern Ireland, and the United States of America assisted Members by developing and running the above workshops. Other Members such as Canada, Finland, France, Germany and Switzerland have provided training opportunities to staff from Member countries without requesting assistance from the WMO Secretariat.

2.8.2 Fellowships

During 2012, the VCP arrangement with partners enabled WMO to support a total of 34 fellowships from 23 countries to participate in short term training. In particular, the provision of VCP Fund from USA allowed WMO to facilitate the training of 27 experts from 23 countries at National Oceanic and Atmospheric Administration (NOAA).

Beneficiary	2012	Budget	Fund
Argentina	1	6,188	USA VCP
Bolivia	1	6,166	USA VCP
Bolivia	1	1,371	VCP (F)
Brazil	1	5,780	USA VCP
Burkina Faso	1	8,936	USA VCP
Colombia	1	6,143	USA VCP
Congo	1	2,025	VCP (F)
Costa Rica	1	6,015	USA VCP
Cote d'Ivoire	1	8,710	USA VCP
Dominican Republic	2	8,686	USA VCP
DR Congo	1	8,863	USA VCP
Ecuador	1	5,564	USA VCP
Egypt	2	12,530	USA VCP
Egypt	2	2,779	VCP (F)
El Salvador	2	12,288	USA VCP
Gambia	1	8,813	USA VCP
Honduras	1	5,567	USA VCP
Kenya	1	7,428	USA VCP
Liberia	1	7,647	USA VCP
Mali	1	2,185	VCP (F)
Mexico	2	3,518	USA VCP
Moldova	1	2,314	VCP (F)
Mozambique	1	8,617	USA VCP
Niger	1	10,036	USA VCP
Nigeria	1	9,124	USA VCP
Peru	1	6,582	USA VCP
Uganda	1	8,112	USA VCP
Uruguay	1	5,830	USA VCP
Zimbabwe	1	2,702	VCP (F)
TOTAL	34	193,279	
	# of	Contribution	
USA VCP	27	179,902	
VCP (F)	7	13,377	

Table 8: Fellows supported by the VCP Fund by beneficiary and the total budget

The US VCP training took the form of on-the-job training at African Desk, South American and Tropical Desk or National Hurricane Center and has provided not only hands-on learning experience on the day-to-day operation at NOAA, but also opportunities for the fellows to establish the professional network. This kind of network would go a long way in fulfilling the purposes of WMO regarding international collaboration in the area of weather, climate and water. This unique experience has shown that short term training through attachment is effective and should be further encouraged for experts from the NMHSs of developing countries, particularly LDCs and SIDSs. Support through VCP is desirable, so as to reduce the burden on regular budget, which is normally targeted at long term training.

For wider reference, Table 9 shows fellows supported by the WMO regular budget and bilateral arrangements. A total of 62 new fellows from 47 countries have benefited from the WMO Fellowship Programme (regular budget) during 2012.

COUNTRY	2012	COUNTRY	2012
Antigua & Barbuda	1	Malawi	2
Belize	2	Mali	1
Benin	2	Mauritania	2
Burundi	2	Myanmar	1
Chad	1	Papua New Guinea	1
Colombia	1	Samoa	1
Comoros	1	Sri Lanka	1
Congo, DR	1	St Lucia	2
Djibouti	1	Swaziland	1
Gambia	1	Tanzania	2
Guinea Bissau	1	Tajikistan	1
Jamaica	1	Thailand	1
Kazakhstan	4	Uzbekistan	2
Kenya	1		
Lithuania	1		
Malaysia	1	TOTAL	40

Table 9: Fellows supported by the WMO regular budget by beneficiaries in 2012

The Fellows shown in Table 9 includes 12 fellows who commenced their training in China in 2011, and 6 Fellows who started their degree programme in Russia in the same year under bilateral arrangements between WMO and the People's Republic of China and Russia respectively. The UK Met Office contributed towards the support for 6 Fellows undertaking study in the United Kingdom and the Australian Bureau of Meteorology contributed towards the costs of students undertaking study in Australia.

2.8.3 Fellowship Fund

The Fellowship Fund was established and launched on World Met Day 2011 to accept private donations in support of Fellowships. While success with respect to private donations has been minimal to date the inclusion of a Fellowship component in all major projects for fellow participating in project areas adds a new source of financing to the Fellowship Programme. Canada, Korea and Norway have already committed resources towards fellowships in 2012, thus leading to further increase in the number of development partners supporting the programme. These fellows will be managed through the usual FeICom mechanism to ensure transparency in application of these funds.

2.9 Enhancement of VCP Coordination

Mr Al-Hamndou Dorsouma recently joined WMO as Senior Programme Manager with the Resource Mobilization Office. He is trained as Geographer and Environmentalist, with extensive experience on the global environment, climate change, resource mobilization and project/programme management. Before joining WMO, Mr. Dorsouma worked as Environment Specialist with the Observatory of Sahara and Sahel (OSS) and as Principal Climate Change Specialist with the African Development Bank (AfDB). He will manage the WMO VCP Programme.

Finland will provide a new JPO for the VCP and Project Coordination Unit support by mid 2013. The PCU will also benefit from a JPO from Norway.

It has been a busy year for the VCP programme as can be seen in the 2012 News Letter Highlights at Appendix 3.

3. Development Activities Update Highlights (see also IPM/2013/Doc. 24)

3.1 Norway GFCS Programme for Africa

“Global Framework for Climate Services: (GFCS) Adaptation and Disaster Risk Reduction in Africa”. The Goal of this Programme is amelioration of weather and climate related disasters and to climate change adaptation through operationalizing the WMO GFCS. Norway MFA’s contribution is NOK 56.8 M (approx. USD 10 M) for the period 2011-2015.

For 2012 there were four components to the project:

1. Support for Global Framework for Climate Services Secretariat
2. Support for African Ministerial Conference on Meteorology (AMCOMET)
3. Severe weather forecasting development programme (SWFDP)
4. Developing climate-related services for agriculture in Africa (METAGRI-OPS)

Highlights from 2012:

- Establishing the GFCS Secretariat in Geneva. Norway led the way supporting GFCS 2012.
- Establishing AMCOMET as a high-level mechanism for the strategic development of weather and climate services in Africa.
- Building capacity and resilience around the prediction of severe weather across East and Southern Africa: (a) strengthen the capacity to weather forecasting and the delivery of warning services; (b) increase lead-time of alerts and warnings; (c) stakeholders’ engagement; (d) monitoring and evaluation; and (e) WMO strategy for service delivery.
- Continuing the successful work of building resilience to climate impacts on food security. Extension of this work across 15 countries in West and North Africa.

3.2 USAID-OFDA - Hydrometeorological Disaster Impact Mitigation Projects

USAID-OFDA³ supported the programme (7M USD) “Hydrometeorological Disaster Impact Mitigation Projects”. The purpose of the programme to implement activities that lessen the impact of hydrometeorological hazards (floods, cyclones, droughts and disasters) globally.

Project Components

1. Floods

- a. Building and strengthening Flash Flood Guidance Systems
- b. Large river flood mitigation projects in river basins to be agreed.
- c. Flood risk management support activities within the context of the Associated Programme on Flood Management.

2. Climate Applications

³ USAID-OFDA - United States Agency for International Development _ Office of Foreign Disaster Assistance

- a. Regional Climate Outlook For a (RCOFs) across various disciplines such as agriculture, water management and health.
- b. The development of Regional Climate Centres.

3. Drought Monitoring

4. Severe Weather Impacts

- a. Early warning systems (EWSs) in the Pacific, Indian Oceans and Caribbean.

5. Capacity Development

- a. Cross cutting capacity development to support NMHSs in agreed regions under the themes above.

In 2012 most activity focused on Component 1. The further implementation of the project on “Development and Implementation of International regional Flash Flood Guidance and Early Warning systems”, activities undertaken by HRC and WMO during the reporting period focused on *FFG System Standardization; Global HydroEstimator (GHE) Adjustment using CMORPH Data; development of Educational and Training Materials* - Flash Flood Guidance-specific courses currently completed included

- Elements of Hydrology
- GIS basics
- Flash Flood Guidance Products
- CAFFG Products

3.3 National GFCS pilot projects in West Africa

The Global Framework for Climate Services (GFCS) piloted three important activities to achieve a more effective and equal climate service system in West Africa: the National Early Warning > Early Action Workshops, to set up a Frameworks for Climate Services at the National level in Burkina Faso, Niger and Mali. All countries are highly vulnerable to changes in the climate, and frequently have to deal with droughts. The Meteorological Services of the 3 countries were supported to carry out their own stakeholder mapping at the national level and reach out to key individuals and organizations across climate-sensitive sectors in the country. Climate-sensitive sectors included: agriculture, food security, disaster management, health, water, infrastructure and transport as well as energy. The national workshops brought together over fifty representatives from climate-sensitive sectors in each country, as well as farmers, herders and community spokespersons, and representatives from boundary organizations such as communicators, rural radios, farmer platforms, and community-based organizations. At the end of the workshop, roadmaps to build National Frameworks for Climate Services in Burkina Faso, Niger and Mali were developed.

3.4 Mobile weather service improves safety of fishermen in Uganda

The Uganda Department of Meteorology, World Meteorological Organization, The Norwegian Ministry of Foreign Affairs, MTN, Ericsson, National Lake Rescue Institute and the Kalangala Fishing community continue to work together in a unique partnership, and combined mobile technology, weather forecasting expertise and local know-how, to provide a localised weather alert service to fishing villages on Lake Victoria. The service has been tested by over 1000 fishermen on Lake Victoria and is now due to be up-scaled and made more widely available in the next three months. The free-of-charge weather information service will enable fishermen and traders to make informed decisions on, for example, when and where to fish in Lake Victoria, helping to save lives and preserve livelihoods. Lake Victoria is the world's second-largest freshwater lake, provides a livelihood, directly and indirectly, to over 3.5 million people. The lake supports Africa's largest inland fishery and produces over 800,000 tons of fish annually, currently worth about USD 600,000,000, and reported estimates indicate that as many as 5,000 fishers die in boating accidents in the lake each year because they are unprepared for bad weather conditions.

3.5 Climate Services to reduce vulnerability in Haiti

The World Meteorological Organisation (WMO) and Environment Canada (EC) signed a grant agreement of USD 6.5 million in November for the project titled “Haiti Weather Systems Programme: Climate Services to Reduce Vulnerability in Haiti”. This 5-year project aims at providing essential support to re-establish weather, climate and hydrology forecasting activities in Haiti under the coordination and management of WMO.

The Project has four main focus areas:

- Constructing a building to house the National Hydro-Meteorological Service (NMHS) of Haiti. The building will be Net-Zero Energy, as well as earthquake and hurricane proof;
- Undertaking capacity building including training of both scientific and technical personnel and developing a business plan for the NMHS taking into account all aspects of developing a functioning and modern weather, climate and hydrology service;
- Re-establishing the climatological and hydrological observing networks and implementing a data management system;
- Developing a wide-reaching dissemination system, to inform stakeholders and the general population of climate related risks.

3.5 CLIMANDES: Climate services for the Alps and Andes

WMO and the NMHS of Peru and Switzerland launched an innovative partnership to strengthen climate services in the Andean nation, building on the scientific knowledge and experience of the Alpine country. Although geographically distant, Peru and Switzerland share the same challenges as a result of their mountainous terrain. High mountains have a significant influence over local weather and climate conditions in both countries. Both are frontline witnesses to the impact of climate change on shrinking glaciers. Peru and Switzerland have united under the umbrella of the Global Framework for Climate Services (GFCS) to launch the project CLIMANDES (Servicios climaticos con enfasis en los Ande en apoyo a las decisiones). This GFCS twinning activity seeks to improve climate services for the Peruvian region and to facilitate their incorporation into decision-making. This 3.5 M USD project is funded by Swiss Development Cooperation through the WMO.

3.7 Irish Aid

A Memorandum of Understanding was signed between Irish Aid and the WMO World concerning cooperation on Food Security in the context of Global Framework for Climate Services (GFCS). The Goal of the Programme is: to strengthen the operational resources of National Meteorological Services to further provide weather / climate information and services to rural farmers and strengthen early warning systems for weather and climate risk management in the agricultural sector. The initial focus will be on AgMet Services in Ethiopia

3.8 Korea Meteorological Administration and Korea International Cooperation Agency (KOICA)

In mid to late 2012 funding was secured from KOICA for the Coastal Inundation Forecasting Project in Fiji - one of three CIFDP Pilots. (Bangladesh is supported by USAID-OFDA and Haiti / Dominican Rep. CIFDP by Canada). KMA has also provided funds for procurement of SAT COMMs system for Lao People’s Democratic Republic.

More information on these activities is found in 2012 News Letter Highlights at Appendix 3.

Appendix 1

VCP requests received in 2012			
COUNTRY	INDICATOR	PROJECT TITLE	REQUESTED ITEMS
ANGOLA		Instruments for 8 GSN stations	Instruments for 8 GSN stations
ARMENIA	ARM/2012	Shipping of instruments for 4 GSN stations to Armenia	Shipping of instruments for 4 GSN stations to Armenia
ARMENIA	ARM/2012/WCP/2/2/1	The installation of the CLIWARE climate data processing system	Cliware Software (Russian version)
ARMENIA	ARM/2012/	Supply of 500 radiosondes	Supply of 500 radiosondes
BELARUS	BY/2012/HY/3/1	Hardware/software complex for the visualization of meteorological data and presentation of specific messages to users of hydrometeorological information	Personal Computer and software
BELARUS	BY/2012/OB/11/2	Delivery of technical equipment and software of the combined technology MITRA-GIS Meteo	technical equipment and software of the combined technology MITRA-GIS Meteo
DEMOCRATIC REPUBLIC OF CONGO		Fixing of microwave radio-link including lightning protection	Fixing of microwave radio-link including lightning protection
CUBA	CU/2012/OB/2/2/2	Upgrade of meteorological 4 stations	Upgrade of meteorological 4 stations
FIJI	FJ/2012/HY/6/1	Emergency Disaster Assistance	
GHANA	GHA/2012/AEM/EX	Implementation of Quality Management Systems based on ISO 9001: 2008 Standards for the Ghana Meteorological Agency	Provision of Technical support (Experts and Equipment) 1. Experts on Quality Management Systems 2. Equipment (Hardware and Software) -Computers - Calibration -Software
GUYANA	GY/2012/WCP/2/1	Acquisition of CLICOM database software and computer	Licences and services, Travel costs and Training, Other Software
KIRIBATI	KI/2009/PWS/EX/1	Development of a Strategic Plan for Kiribati Meteorological Service	financial and technical assistance through an expert/consultant and a national workshop to develop a Strategic Action Plan
KIRIBATI	KI/2010/OB/2/2	Installation of internet equipment at synoptic and meteorological stations in the Republic of Kiribati.	- SYNOP / Met Stations Equipment - Logistic and Installation - Airfare and Boatfare
MADAGASCAR		Renovation of 11 GSN stations in Madagascar	Renovation of 11 GSN stations
MALDIVES		Supply of 800 radiosondes and 800 balloons	Supply of 800 radiosondes (Eur 65,000.00) + 800 balloons (US\$ 5,200.00)
MAURITANIA	MR/2012/PWS/1/1/2	Provision of a TV Weather Presentation System	Equipment and software for TV studio
MEXICO		GCOS support for acquisition of radiosondes for stations in Mexico in 2012	Support to acquisition of radiosondes
MOLDOVA	MDA/2012/WCP/2/2/1	The installation of the CLIWARE climate data processing system	Cliware Software (Russian version)
SAMOA	WS/2012/AEM/EX	Expert Services to assist establishing the Meteorology Division Quality Management System (QMS) for aviation	Airfare, DSA

		services	
SUDAN	SD/2012/OB/1/2/17	Radiosonde transmitters and balloons	Supply of 400 radiosondes (no GUAN Stations)
TAJIKISTAN	TJK/2012/WCP/2/2/1	The installation of the CLIWARE climate data processing system	Cliware Software (Russian version)
TANZANIA		Supply of radiosondes	
UGANDA	UG/2012/OB/1/2/7	Upgrade of the Upper Air Station in Entebbe	equipment, installation, training
URUGUAY	EC/2012/AEM/EX	Support for the Implementation of Quality Management System in the aeronautical meteorological service."	WMO expert Uruguay, stay 15 days,
VANUATU	VU/2012/OB/2/2/1	Rehabilitation of Aneityum Meteorological Station	New meteorological instruments
VANUATU	VU/2012/OB/2/2/2	Rehabilitation of Whitegrass (Tanna) Meteorological Station	New meteorological instruments
VANUATU	VU/2012/AEM/EX	Expert services to conduct auditing of Vanuatu Meteorology and Geo-hazard Department Quality Management System for Aviation Services	Travel and DSA
VANUATU	VU/2012/TE/1/1/3	Improvement of meteorological telecommunications systems	Equipment (remote SSb/digital VHF radio systems), installation of the equipment
ZAMBIA		Automatic Message Switching System (AMSS) for use as Global Telecommunications System (GTS)	
ZIMBABWE	ZW/2012/OB/2/2/1	Replacement of standard instruments on 10 GSN stations	Instruments at 10 GSN stations need to be replaced

Appendix 2

VCP (F) Activities Expenditure 2012

VCP (F) Activities Supported in 2011		USD
1	Expert Services	53,858
	Expert mission to Kiribati to update the Meteorological Service Strategic Plan 2012 - 2018	5,657
	Expert Mission to Samoa to conduct QMS training, 24-28 September	7,334
	Expert services for Drafting of Meteorology Bill for the Kingdom of Tonga	14,623
	Expert mission to Fiji to attend training workshop on Meteorological equipment and instruments maintenance, Calibration and repair	2,623
	Expert services to Uganda for Met Office upgrades.	2,296
	Expert services to conduct External Audits for Aviation Services, Solomon Islands 23-27 July 2012	3,258
	Expert services to conduct External Audits for Aviation Services, Vanuatu 2-6 July 2012	1,631
	Support to the 39 th Session of WMO/ESCAP Panel on Tropical Cyclones, Myanmar 5-9 March	1,512
	Expert mission to attend Site Acceptance Test for a Doppler Weather Radar	868
	Expert Mission to BMD, Dhaka Bangladesh, 8 – 12 January 2012	12,739
2	Project Development	2,422
	Expert mission to Mauritania, 16-20 September	2,422
3	Fellowships and Training activities	
	Fellowship for Ms Cristina Maria Chirinos from Bolivia to undertake a 4 month training at the South American Tropical Desk from 1 August to 28 November, 2012	1,371
	Financial assistance to attend the Steering Group - SWFDP project, Geneva , Switzerland	5,869
	International Training course on "Climatology, a step towards climate services", Toulouse France 11-12 June 2012	11,006
	Financial assistance to attend the WMO (SDS-WAS) hands-on training workshop on dust modelling, Belgrade, Serbia	1,000
	Financial assistance to attend Workshop on Aeronautical meteorology on east and central Africa, Etiopía, 8-12 October	14,830
	International Training Seminar on "Methods for Short-term Climate Predication", Nanjing, Beijing, China, 26 March to 7 April 2012	1429
	Operational Aeronautical Meteorology, Uni. La Molina, WMO RTC, Lima, Peru, 23-27 April 2012	1971
	International Training Course on "Radar Meteorology", to be held from 11 to 22 June 2012, in the RTC Nanjing, China.	18033
	Intl School on Data Assimilation (EISDA 2012), Seoul, Rep. of Korea, 22-24 Aug 2012	3189
	Intl Training Course on Nowcasting, Beijing, China, 3-14 Sept 2012	7511
	Intl Training Course on Reg. Climate Prediction & Drought Monitoring & Warning, Beijing, China, 17-27 Sept 2012	7726

	6th International Training Course on Weather radars, 8-12 October 2012, Marmaris, Muglia, Turkey	4611
	ECMWF Training Course use and interpretation of ECMW products in national meteorological and hydrological services, Course code OP_WMO, 8-12 October 2012, UK, Reading	1500
	6th Intl Training Course on Télécommunication météorologique et le système d'information de l'OMM, Antalya, Turkey, 1-6 Oct 2012	3280
	3rd International Training Course on "Upper Air Observing Systems", Istanbul, Turkey, 15-19 October 2012	500
	International Training Course on "Application of Meteorological Satellites in Disaster Mitigation and Environmental Studies, 22 Oct. - 2 Nov. 2012, Beijing, China	7199
	Workshop on Competence Assessment of Aviation Forecasters and Observers, Israel, 29 October to 2 November 2012	11983
	International Training Course on "Prévisions météorologiques dans les régions des latitudes moyennes, 13 -23 Novembre 2012, Toulouse, France	2149
	International Training Workshop on Implementing Competency Assessment for Aeronautical Meteorological Personnel, 5-9 December 2011, Hong Kong, China	317
5	VCP Spares/shipping of equipment	52,908
	Financial support towards the "Provision of Hg barometers to Latin American and Caribbean NHMSs (Letter of Agreement between WMO and the DWD)	17,943
	Financial support towards infrastructure procurement and activities for the " Transformation from WAFS Satellite to WAFS Internet Reception"	22,680
	Financial support to purchase the hydrometeorological thermometers for the Republic of Armenia	12,285
6	Support to CDMS and CLIMATOLOGICAL Activities	7,485
	LoA with Meteo-France- WMO` s contribution to implementation of Project on rescue of climatological data in Madagascar including rehabilitation of the CliSys system.	7,485
7	TV Promotion and Distribution	42,495
	Support to reinforcing the equipment of Mauritania National Meteorological Office for the publication on meteorological bulletins on Mauritania TV	23,287
	Upgrading and strengthening of the Public Weather Services presentation on NMA, Ethiopia	19,208
	TOTAL	258,723

WMO Voluntary Cooperation Programme & Development and Regional Activities

January – December 2012

Happy New Year

The VCP Team wishes you a happy new year and all the best for 2013. We would like to thank you all for your involvement in 2012 and we are looking forward to continue working with you this year.



VCP Projects

Requests for VCP assistance received in 2012

In 2012, the VCP Secretariat received new requests for support from Armenia, Belarus, Cuba, Fiji, Ghana, Guyana, Kiribati, Mauritania, Moldova, Samoa, Sudan, Tajikistan, Uganda, Vanuatu and Zimbabwe. A total of 21 requests were received in 2012 and of these we were able to find sponsorship for 17 projects, which is 80% of all requests. At the beginning of 2013, there are still 4 outstanding requests from 2012, and 6 from 2011.

Key projects and activities from 2012

- Emergency Disaster Assistance to Fiji for following severe flooding in early 2012
- Expert mission to Kiribati to update the Meteorological Service Strategic Plan
- Support to reinforcing the NMS of Mauritania and Ethiopia for broadcasting meteorological bulletins on local TV.
- Expert mission to Samoa to conduct QMS training for aviation services
- Expert services provided for Drafting of Meteorology Bill for the Kingdom of Tonga, Niue and Vanuatu
- Expert mission in Seychelles for the installation of two Automatic Weather Stations
- LoA with Meteo-France- WMO's contribution to implementation of Project on rescue of climatological data in Madagascar including rehabilitation of the CliSys system.

Other countries that received support; included, Angola, Belarus, Cuba, Fiji, Madagascar, Maldives, Mexico, Moldova, Sudan, Tajikistan, Tanzania, Vanuatu and Zambia. For an overview of on-going projects, outstanding requests and links to partners and donors, please check our website at <http://www.wmo.int/pages/prog/dra/vcp/on-going.php>

We welcome offers of support for unmet outstanding requests!

VCP News Highlights

Next IPM Meeting

The next Informal Planning Meeting (IPM) of major donors to the VCP will be held from 18-19 April 2013 in Curaçao immediately following the Sixteenth Session of Regional Association IV (RA IV-16) meeting, as requested by many of you. Apologies to our Japanese colleagues that we were unable to take up their offer to host the meeting in Tokyo due to constraints on travel of many members. As mentioned by the IPM Chair, Mr. Jaakko Nuottokari, please confirm your participation to the meeting and send us the requested information as soon as possible.

Staff Update



Mr. Al-Hamndou Dorsouma recently joined WMO as Senior Programme Manager with the Resource Mobilization Office. He is trained as Geographer and Environmentalist, with extensive experience on the global environment, climate change, resource mobilization and project/ programme management. Before joining WMO, Mr. Dorsouma worked as Environment Specialist with the Observatory of Sahara and Sahel (OSS) and as Principal Climate Change Specialist with the African Development Bank (AfDB).

Upgrading and strengthening the Public Weather Services presentation of NMA, Ethiopia

The UK Met Office sent a media designer and technician to Addis for 10 days to help with the upgrading and strengthening of the Public Weather Services presentation at NMA. Ethiopia was the first NMS to receive the 'mini-studio' nearly 20 years ago. The new digital TV kit delivered by the UKMO in collaboration with the VCP is a significant step up from the old equipment. NMA also received some training on their presentation skills and graphics.



New Studio Camera & monitor



Broadcasts can now be archived for training and resource purposes and there is a possibility for producing a lunchtime weather broadcast for the National TV station, as the digital transfer time allows for the possibility to record much nearer the broadcast time.

Ethiopia handover ceremony

VCP News Highlights

WMO VCP Expert Mission to Bangladesh Meteorological Department (BMD), Dhaka, Bangladesh 8 – 12 January 2012

At the request from Ms Arjumand Habib, Director of BMD and Permanent Representative of Bangladesh with WMO, an expert mission to BMD was carried out from 8 to 12 January 2012 within the framework of the WMO Voluntary Cooperation Programme (VCP), by experts from the Japan Meteorological Agency (JMA), the Japan Broadcasting Corporation (NHK) and Oriental Electronics, Inc. The goal of the mission was to assess the current status of meteorological services and to formulate appropriate recommendations in order for BMD to strengthen its capabilities focusing on the enhancement of access to data and products via the GTS, the improvement of weather analysis including extensive use of tool software and the improvement of TV weather presentation capability.



Discussions at the Bangladesh Telecommunications Company on the present situation and the future plan of the network in Bangladesh.

Discussion at the Bangladesh Television on possibilities for a TV weather broadcasting system.



Recording video content at Storm Warning Center for a weather program on the TV

WMO Secretary General, accompanied by Director Resource Mobilization later made a visit to People's Republic of Bangladesh for high level talks to strengthen government support to the BMD. Significant discussions were had with high level government representatives including Her Excellency, Madam Sheikh Hasina, and Prime Minister.

In late 2012 funding was secured from USAID-OFDA for implementation of the Coastal Inundation Forecasting Project in Bangladesh, one of three CIFDP Pilots. (Fiji CIFDP is funded by Korea International Cooperation Agency (KOICA) and Haiti / Dominican Rep. CIFDP by Canada.

VCP News Highlights

Letter of Appreciation- Mr. Arif Mahmood, Director General, Pakistan Meteorological Department



PMD
Tel: + (92-51) 9250367
Fax: + (92-51) 9250368

No. Co (Isb)-3(3)/WMO/VCP/2010/
Government of Pakistan
Ministry of Defence
Pakistan Meteorological Department
Headquarters Office
Sector H-8/2
Islamabad - 44000
Website: www.pakmet.com.pk
Email: Pakmet_islamabad@yahoo.com

Dated: 10th December, 2012

The Secretary General,
World Meteorological Organization,
7 bis, avenue de la Paix,
Case postale 2300,
CH 1211, Geneva 2,
Switzerland
Fax: +41 22 730 8181

Subject: Donation of 10 AWS Stations to PMD by the Government of Finland / Finnish Meteorological Institute

Dear Sir,

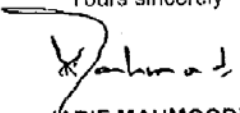
I feel great pleasure in acknowledging the delivery of ten (10) Automatic Weather Stations (AWSs) as donation by the Government of Finland through their Ministry of Foreign Affairs and the Finnish Meteorological Institute (FMI) under WMO Voluntary Cooperation Programme (VCP) framework.

The whole credit concerning to the delivery of AWSs to PMD goes to the WMO for their remarkable efforts and excellent coordination among the NMHSs around the globe especially in wake of Super Floods-2010 in Pakistan. No doubt, the addition of 10 AWSs will further denser the hydrometeorological observational network of PMD and will greatly improve the flood monitoring / forecasting capabilities of PMD for effectively addressing the hydrometeorological disaster risk reduction challenges in the country in future.

Availing this opportunity, I wish to extend my sincere appreciation to WMO for their valuable support in perspective of emergency disaster assistance to Pakistan and I also look forward for WMO's continued support to PMD for the strengthening and development of its capacities in meteorology and related disciplines.

With best regards

Yours sincerely


(ARIF MAHMOOD)
Director General, PMD

Development Activities Update

Norway GFCS Programme for Africa

“Global Framework for Climate Services: (GFCS) Adaptation and Disaster Risk Reduction in Africa”. The Goal of this Programme is amelioration of weather and climate related disasters and to climate change adaptation through operationalizing the WMO GFCS. Norway MFA's contribution is NOK 56.8 M (approx. USD 10 M) for the period 2011-2015.



For 2012 there were four components to the project:

1. Support for Global Framework for Climate Services Secretariat
2. Support for African Ministerial Conference on Meteorology (AMCOMET)
3. Severe weather forecasting development programme (SWFDP)
4. Developing climate-related services for agriculture in Africa (METAGRI-OPS)

Highlights from 2012:

- Establishing the GFCS Secretariat in Geneva. Norway led the way supporting GFCS 2012.
- Establishing AMCOMET as a high-level mechanism for the strategic development of weather and climate services in Africa.
- Building capacity and resilience around the prediction of severe weather across East and Southern Africa: (a) strengthen the capacity to weather forecasting and the delivery of warning services; (b) increase lead-time of alerts and warnings; (c) stakeholders' engagement; (d) monitoring and evaluation; and (e) WMO strategy for service delivery.
- Continuing the successful work of building resilience to climate impacts on food security. Extension of this work across 15 countries in West and North Africa.

Plan for 2013

For the second year we have continued work in the original components and extended the programme into 3 other areas; the creation of a Norwegian Fellowship Programme, Climate and Health activities to support the outcomes from GFCS Extraordinary Congress and improvements to the Public Weather Services in countries where the SWFDP has already begun to strengthen forecast capability.



1. Global Framework for Climate Services (GFCS) – maintaining the secretariat for the development of the strategy.
2. African Ministerial Conference on Meteorology (AMCOMET) – further support to continue the work from Victoria Falls.
3. Severe weather forecasting development programme (SWFDP).
4. Public Weather Service (PWS)
5. Developing weather and climate services for 2 of the 4 priority areas of GFCS.
 - a. Developing climate-related services for Agriculture
 - b. Developing climate-related services in Climate and Health
6. Norwegian Fellowships Fund: 4 to 6 new African fellowships at Masters Level in meteorology, hydrology or climatology with links to climate service

Development Activities Update

USAID-OFDA - Hydrometeorological Disaster Impact Mitigation Projects

USAID-OFDA⁴ supported the programme (7M USD) “Hydrometeorological Disaster Impact Mitigation Projects”. The purpose of the programme to implement activities that lessen the impact of hydrometeorological hazards (floods, cyclones, droughts and disasters) globally.

Project Components

1. **Floods**
 - b. Building and strengthening Flash Flood Guidance Systems
 - c. Large river flood mitigation projects in river basins to be agreed.
 - d. Flood risk management support activities within the context of the Associated Programme on Flood Management.
2. **Climate Applications**
 - e. Regional Climate Outlook For a (RCOFs) across various disciplines such as agriculture, water management and health.
 - f. The development of Regional Climate Centres.
3. **Drought Monitoring**
4. **Severe Weather Impacts**
 - g. Early warning systems (EWSs) in the Pacific, Indian Oceans and Caribbean.
5. **Capacity Development**
 - h. Cross cutting capacity development to support NMHSs in agreed regions under the themes above.

In 2012 most activity focused on Component 1. The further implementation of the project on “Development and Implementation of International regional Flash Flood Guidance and Early Warning systems”, activities undertaken by HRC and WMO during the reporting period focussed on *FFG System Standardization; Global HydroEstimator (GHE) Adjustment using CMORPH Data; development of Educational and Training Materials* - Flash Flood Guidance-specific courses currently completed included

- Elements of Hydrology
- GIS basics
- Flash Flood Guidance Products
- CAFFG Products

And **Development of new FFG project components:**

- Supporting documents were developed to conduct planning meetings for the foreseen new project components in South Asia and South East Europe.
- The South Asia FFG (SAsia-FFG) planning meeting has been successfully conducted from 26-28 November 2012 at ICIMOD in Kathmandu, Nepal. All foreseen participating countries were present with the exception of Afghanistan that had however voiced its interest in the project. The draft meeting report has been compiled and sent for comment to participants.
- South East Europe FFG (SEE-FFG) have been developed, participants are being invited and the meeting will be held in Ankara from 22-24 January 2013.

⁴ USAID-OFDA - United States Agency for International Development _ Office of Foreign Disaster Assistance

Development Activities Update

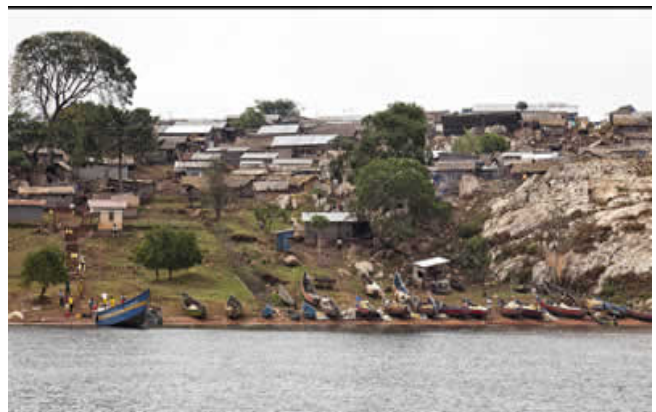
National GFCS pilot projects in West Africa

The Global Framework for Climate Services (GFCS) piloted three important activities to achieve a more effective and equal climate service system in West Africa: the National Early Warning > Early Action Workshops, to set up a Frameworks for Climate Services at the National level in Burkina Faso, Niger and Mali. All countries are highly vulnerable to changes in the climate, and frequently have to deal with droughts. The Meteorological Services of the 3 countries were supported to carry out their own stakeholder mapping at the national level and reach out to key individuals and organizations across climate-sensitive sectors in the country. Climate-sensitive sectors included: agriculture, food security, disaster management, health, water, infrastructure and transport as well as energy. The national workshops brought together over fifty representatives from climate-sensitive sectors in each country, as well as farmers, herders and community spokespersons, and representatives from boundary organizations such as communicators, rural radios, farmer platforms, and community-based organizations. At the end of the workshop, roadmaps to build National Frameworks for Climate Services in Burkina Faso, Niger and Mali were developed.



Mobile weather service improves safety of fishermen in Uganda

The Uganda Department of Meteorology, World Meteorological Organization, The Norwegian Ministry of Foreign Affairs, MTN, Ericsson, National Lake Rescue Institute and the Kalangala Fishing community have come together in a unique partnership, and combined mobile technology, weather forecasting expertise and local know-how, to provide a localised weather alert service to fishing villages on Lake Victoria. The service has been tested by over 1000 fishermen on Lake Victoria and is now due to be up-scaled and made more widely available in the next three months. The free-of-charge weather information service will enable fishermen and traders to make informed decisions on, for example, when and where to fish in Lake Victoria, helping to save lives and preserve livelihoods. Lake Victoria is the world's second-largest freshwater lake, provides a livelihood, directly and indirectly, to over 3.5 million people. The lake supports Africa's largest inland fishery and produces over 800,000 tons of fish annually, currently worth about USD 600,000,000, and reported estimates indicate that as many as 5,000 fishers die in boating accidents in the lake each year because they are unprepared for bad weather conditions.



Development Activities – New Funding Agreements

Climate Services to Reduce Vulnerability in Haiti (Canada and WMO)

The World Meteorological Organisation (WMO) and Environment Canada (EC) signed a grant agreement of USD 6.5 million in November for the project titled “Haiti Weather Systems Programme: Climate Services to Reduce Vulnerability in Haiti”. This 5-year project aims at providing essential support to re-establish weather, climate and hydrology forecasting activities in Haiti under the coordination and management of WMO.

The Project has four main focus areas:

- Constructing a building to house the National Hydro-Meteorological Service (NMHS) of Haiti. The building will be Net-Zero Energy, as well as earthquake and hurricane proof;
- Undertaking capacity building including training of both scientific and technical personnel and developing a business plan for the NMHS taking into account all aspects of developing a functioning and modern weather, climate and hydrology service;
- Re-establishing the climatological and hydrological observing networks and implementing a data management system;
- Developing a wide-reaching dissemination system, to inform stakeholders and the general population of climate related risks.

CLIMANDES: Climate services for the Alps and Andes

WMO and the NMHS of Peru and Switzerland launched an innovative partnership to strengthen climate services in the Andean nation, building on the scientific knowledge and experience of the Alpine country. Although geographically distant, Peru and Switzerland share the same challenges as a result of their mountainous terrain. High mountains have a significant influence over local weather and climate conditions in both countries. Both are frontline witnesses to the impact of climate change on shrinking glaciers. Peru and Switzerland have united under the umbrella of the Global Framework for Climate Services (GFCS) to launch the project CLIMANDES (Servicios climaticos con enfasis en los Ande en apoyo a las decisiones). This GFCS twinning activity seeks to improve climate services for the Peruvian region and to facilitate their incorporation into decision-making. This 3.5 M USD project is funded by Swiss Development Cooperation through the WMO.



CLIMANDES Launch. MOU Signature

Irish Aid

A Memorandum of Understanding was signed between Irish Aid and the WMO World concerning cooperation on Food Security in the context of Global Framework for Climate Services (GFCS). The Goal of the Programme is: to strengthen the operational resources of National Meteorological Services to further provide weather / climate information and services to rural farmers and strengthen early warning systems for weather and climate risk management in the agricultural sector. The initial focus will be on AgMet Services in Ethiopia

Korea Meteorological Administration (KMA) and Korea International Cooperation Agency (KOICA)

In mid to late 2012 funding was secured from KOICA for the Coastal Inundation Forecasting Project in Fiji - one of three CIFDP Pilots. (Bangladesh is supported by USAID-OFDA and Haiti / Dominican Rep. CIFDP by Canada). KMA has also provided funds for procurement of SAT COMMs system for Lao People's Democratic Republic.

Important meetings in 2012

Extraordinary Session of the World Meteorological Congress (October 29th -31st)



After 3 days of deliberations, debates and discussions the 129 countries present reached consensus on three resolutions – namely on the implementation plan, the governance structure and the budgetary provisions for the Global Framework for Climate Services. All approved documents can be found on the Congress Webpage. Very strong opening statements of support and commitment were made by the heads of the four lead partner organizations (FAO, UNESCO, UNISDR, WHO), all calling for partnerships and immediate action.

AMCOMET - Second Session of the African Ministerial Conference on Meteorology



The 2nd African Ministerial Conference on Meteorology adopted an Integrated African Strategy for Meteorology that seeks to address the challenges posed by climate change and extreme weather hazards. The ministerial conference, which took place from 15-19 October 2012, in Victoria Falls, Zimbabwe, organized with the African Union Commission (AU) and the Government of Zimbabwe focused on how to improve weather and climate services for sustainable development, particularly for agriculture, water, health, disaster risk reduction (DRR) and transport. Conference participants noted that many National Meteorological and Hydrological Services (NMHSs) in Africa operate with poor infrastructure and limited capability.

The Integrated African Strategy on Meteorology (Weather and Climate Services) adopted at the conclusion of the conference, and more recently endorsed by the African Union XXII Summit in Feb 2013, aims to, inter alia: increase political support and recognition of NMHSs and related Regional Climate Centres; support the provision of weather and climate services for climate change adaptation and mitigation; and strengthen partnerships with relevant institutions and funding mechanisms. The Strategy will enhance cooperation among African countries and improve the capacity of NMHSs to implement the Global Framework for Climate Services (GFCS), which is being developed by WMO and its UN partners to improve climate services, especially for the most vulnerable.

The TICAD V Preparatory Senior Officials' Meeting (SOM), Burkina Faso

TICAD, the “Tokyo International Conference on African Development”. was launched in 1993 to promote high-level policy dialogue between African leaders and development partners. TICAD has since evolved into a major global framework to facilitate the implementation of initiatives for promoting African development under the dual principle of African “ownership” and international “partnership”. The TICAD V Preparatory Meeting in Ouagadougou November 15 -17 aimed to advance preparation for TICAD V, which will be held from June 1 to 3 in Yokohama, Japan. WMO has been invited to submit priorities for inclusion in TICAD V Action Plan. Support for the implementation of the Integrated African Strategy on Meteorology (Weather and Climate Services) has been proposed as the main focus for TICAD V.

Second Conference on Climate Change and Development in Africa (CCDA-II)

The participants of the Second Conference on Climate Change and Development in Africa (CCDA-II) October 2012 called the conference the African climate change event of the year. A cross section of participants, including negotiators, academicians, policy-makers, scientists and the media all agreed that the conference had been a huge success in terms of content and organization. In a statement read at the end of the conference, participants adopted a number of recommendations on climate service delivery; sustainable energy access for all Africans by 2030; and on outstanding issues in climate negotiations, especially as they relate to Africa.

Important meetings in 2012

WMO Regional Association for Asia Agrees Priority work Areas

About 90 delegates from WMO's Regional Association for Asia (RAII) met 13-19 December in Doha, Qatar, to agree on priority work areas for the next three years to strengthen weather, climate and water services. Ahmed Abdullah Mohamed, the Permanent Representative of Qatar to WMO, was elected as the new president. Dr Qamar-uz Zaman Chaudhry, Permanent Representative of Pakistan, was re-elected as Vice President. RA II groups 35 countries spread across a large geographical zone and impacted by diverse hazards including sand and dust storms, droughts,

heat and cold waves, tropical cyclones, floods and air pollution. The meeting adopted a new strategic operational plan for 2012-2015. Its priorities include:



- Further improvement of service delivery capacity at national and regional level;
- Implementation of the Global Framework for Climate Services recently approved by the Extraordinary World Meteorological Congress ;
- Enhanced national and regional multi-hazard disaster risk reduction, including for regional-specific problems like sand and dust storms;
- Regional development of WMO Integrated Global Observing System and regional implementation of the WMO Information System (WIS), to improve and expand the current exchange of weather, climate and water data, and cut the costs involved;
- Strengthening of aeronautical and marine meteorological services.

GCOS 1992-2012 - 20 Years in Service for Climate Observations

The year 2012 marked the 20th anniversary of the Global Climate Observing System (GCOS), the system dedicated to ensuring provision of the observational data and information that is the foundation for decisions on climate. The GCOS Programme formally celebrated the 20th anniversary of the Global Climate Observing System on Friday, 29 June 2012 during the 64th WMO Executive Council meeting in Geneva. The celebration

provided an opportunity to review the origins of the GCOS, to take stock of the accomplishments of GCOS in the first twenty years of its existence, and to think ahead about new opportunities and challenges for GCOS. VCP works very closely with GCOS for installation and / or rehabilitation of the GCOS priority network.

Doha Climate Change Conference

The 18th session of the Conference of the Parties to the UNFCCC and the 8th session of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol opened on Monday, 26 November and continued until Saturday, 8 December 2012 at the Qatar National Convention Centre in Doha.



The CIF 2012 Partnership Forum

WMO, (DSG and D/RMO) participated in the Climate Investment Funds 2012 Partnership Forum, in Istanbul in November where DSG provided a statement on the GFCS and the role of NMHS in climate resilience., The Forum, co-hosted by World Bank, Regional Development Banks and the European Bank for Reconstruction and Development (EBRD), provided a opportunity for diverse stakeholders – governments, civil society, indigenous peoples, private sector, and others – to contribute to understand the linkages

between climate change and development as they have been addressed within the context of the Climate Investment Funds (CIF). As all CIF programs (on clean technology, forest investments, climate resilience and scaling up renewable energy in low income countries) are moving into implementation of investments at the country level, the Forum focused on effective on-the-ground implementation, knowledge-building and sharing of lessons.
