



ASSOCIATED PROGRAMME ON FLOOD MANAGEMENT



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FLOOD MANAGEMENT**

ANNUAL REPORT (2014-2015)

August 2015
Geneva, Switzerland



The Associated Programme on Flood Management (APFM) is a joint initiative of the World Meteorological Organization (WMO) and the Global Water Partnership (GWP). It promotes the concept of Integrated Flood Management (IFM) as a new approach to flood management. The programme is financially supported by the Government of Switzerland and USAID.



The World Meteorological Organization (WMO) is a specialized agency of the United Nations. It coordinates the activities of the meteorological and hydrological services of 191 countries and territories and is the authoritative voice on weather, climate and water.



The Global Water Partnership (GWP) is an international network open to all organizations involved in water resources management. It was created in 1996 to foster Integrated Water Resources Management (IWRM).

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LIST OF SUB MATERIALS

- I.
 - (a) **Strategic Plan 2014-2018**
 - (b) **Activity Plan of APFM Phase IV 2014-2015**

- II. **Flood Management Policy Series**
 - (a) IFM Concept Paper 3rd Edition (en, fr, sp, ru, jp, ch)
 - (b) Legal and Institutional Aspects of IFM (en, fr, sp, jp, srb)
 - (c) Environmental Aspects of IFM (en, fr, sp, jp)
 - (d) Social Aspects and Stakeholder Involvement in IFM (en, fr, sp)
 - (e) Economic Aspects of IFM (1st and 2nd edition) (en)
 - (f) Primer on Integrated Flood Management- ToC

- III. **IFM Tools**
 - (a) Formulating a Basin Flood Management plan
 - (aa) Flood Management in a Multi-hazard Environment for the Private Sector
 - (ab) Asistencia tecnica para la preparacion de una estrategia de incidencia politica
 - (b) Conducting Flood Loss Assessments (v 2.0)
 - (c) Applying Environmental Assessment for Flood Management (v 2.0)
 - (d) Organizing Community Participation for Flood Management
 - (e) Reservoir Operations and Managed Flows (v 2.0)
 - (f) Urban Flood Risk Management
 - (g) The Role of Land-Use Planning in Flood Management
 - (h) Risk Sharing In Flood Management (v 2.0)
 - (i) Flood Management in a Changing Climate
 - (j) IFM as an Adaptation Tool for Climate Change (Case Studies)
 - (k) Flood Emergency Planning
 - (l) Management of Sediment-related Risks
 - (m) Conservation and Restoration of Rivers and Floodplains
 - (n) Urban Flood Management in a Changing Climate
 - (o) Flood Proofing
 - (p) Management of Flash Floods
 - (q) Coastal and Delta Flood Management
 - (r) Transboundary Flood Management
 - (s) Flood Forecasting and Early Warning
 - (t) Flood Mapping
 - (u) Regulations and Technical Standards of Flood Management
 - (v) Health and Sanitation Aspects of Flood Management
 - (w) The Role of the Media in Flood Management
 - (x) Social Impact Assessment and Public Perception of Flood Risk in IFM-Spanish
 - (xa) Social Impact Assessment and Public Perception of Flood Risk in IFM-English
 - (y) Effectiveness of Flood Management Measures
 - (z) Crisis Mapping and Crowdsourcing in Flood Management

*Bold indicates materials that are newly added or updated in this report. For the following materials, only new publications are mentioned.



- IV. **National and Regional support activities**
 - (a) INFORME DE ASISTENCIA TECNICA_translation
 - (b) PEARL Progress Report - Internal - WMO - 2014-12
 - (c) PEARL – Progress Report Summary (Internal Report)
 - (d) Thailand and Lao Community Based Flood Management Pilot Project (Internal Report)

- V. **New implementation proposals**
 - (a) Concept Note West –Central Africa Project Prep-IFM
 - (b) Needs Assessment Guidelines West Africa

- VI. **Outreach**
 - (a) Newsletters (No.34, No.35, No.36)
 - (b) Integrated Policies and practices for flood and drought risk management
 - (c) Article for Guest Editor initiative by UNISDR
 - (d) Article on Latin America Geospatial Portal on case study by UNOSAT

- VII. **APFM Past Reports**
 - APFM Report No. 1 - Interim Steering Committee meeting Aug 2001
 - APFM Report No. 2 - First coordination meeting Jan 2002
 - APFM Report No. 3 - First Consultative meeting on Building Partnerships Feb 2002
 - APFM Report No. 4 - Inception report
 - APFM Report No. 5 - First Steering Committee meeting Mar 2002
 - APFM Report No. 6 - Second consultative meeting on Building Partnerships Nov 2002
 - APFM Report No. 7 - Annual report 2002-2003 (without annexes)
 - APFM Report No. 8 - Second Steering Committee meeting June 2003
 - APFM Report No. 9 - Annual Report 2003-2004
 - APFM Report No. 10 - ACMC meeting Jun 2004
 - APFM Report No. 11 - Annual Report 2004-2005
 - APFM Report No. 12 - ACMC meeting Jun 2005
 - APFM Report No. 13 - Annual Report 2005-2006
 - APFM Report No. 14 - Activity plan of APFM Phase II
 - APFM Report No. 15 - Activity plan 2006-2007
 - APFM Report No. 16 - ACMC meeting May 2006
 - APFM Report No. 17 - Phase I Final report
 - APFM Report No. 18 - Annual Report 2006-2007
 - APFM Report No. 19 - ACMC meeting Jun 2007
 - APFM Report No. 20 - Annual Report 2007-2008
 - APFM Report No. 21 - ACMC meeting Jun 2008
 - APFM Report No. 22 - Annual Report 2008-2009
 - APFM Report No. 23 - ACMC meeting Jun 2009
 - APFM Report No. 24 - Annual Report 2009-2010
 - APFM Report No. 25 - ACMC meeting Jun 2010
 - APFM Report No. 26 - Phase II Final report
 - APFM Report No. 27 - Annual Report 2010-2011
 - APFM Report No. 28 - ACMC meeting Jun 2011
 - APFM Report No. 29 - Annual Report 2011-2012
 - APFM Report No. 30 - ACMC meeting Jun 2012

- APFM Report No. 31 - Annual Report 2012-2013
- APFM Report No. 32 - ACMC meeting Jun 2013
- APFM Report No. 33 - Annual Report 2013-2014
- APFM Report No. 34 - ACMC Report 2014
- APFM Report No. 35 - Strategic Plan 2014-2018
- APFM Report No. 36 - Activity Plan of APFM Phase IV 2014-2015

ACRONYMS

AC/MC	Advisory Committee/Management Committee
ADPC	Asian Disaster Preparedness Center
AMCOW	African Ministers' Council on Water
APFM	Associated Programme on Flood Management
BfG	German Federal Institute of Hydrology
BSH	WMO Basic Systems in Hydrology Division
BWDB	Bangladesh Water Development Board
CapNet/UNDP	Capacity Development in Sustainable Water Management/UNDP
CBFM	Community Based Flood Management
CBHWR	WMO Capacity Building in Hydrology and Water Resources Management Office
CDSF	Clim-Dev Special Fund
CEH	UK Centre for Ecology & Hydrology
CERAH	Geneva University Centre for Education and Research in Humanitarian Action
CERG-C	Geneva University Specialization certificate for the assessment and management of geological and climate related risk
CONAGUA	Mexico's Comisión Nacional del Agua
COP	Conference of Parties
CPA	WMO Communications and Public Affairs Office
CRAHI	Centre de Recerca Aplicada en Hidrometeorologia – Catalonia University
DHI	Danish Hydraulic Institute
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction (Also a WMO Programme)
EC	European Commission
ETR	Education and Training Office
EU-FP7	European Union 7 th Framework Programme
EVD	Ebola Virus Disease
FICH/UNL	Facultad de Ingeniería y Ciencias Hídricas/Universidad del Litoral - Faculty of Engineering and Hydro-sciences of the Litoral University
FOEN	Federal Office for the Environment, Switzerland
GFCS	Global Framework for Climate Services
GIS	Geographic Information System
GRID/UNEP	Global Risk Data Platform
GWA	Gender and Water Alliance
GWP	Global Water Partnership
IAB	Inter-Agency Board
ICFM6	International Conference on Flood Management 6
ICID	International Commission for Irrigation and Drainage
IDMP	Integrated Drought Management Programme



IFM	Integrated Flood Management
IPA	Instrument for Pre-Accession Assistance
ISRBC	International Sava River Basin Commission
IWRA	International Water Resources Association, Scotland
IWRM	Integrated Water Resources Management
NGO	Non-Governmental Organization
NiMET	Nigerian Meteorological Agency
OSCE	Organization for Security and Co-operation in Europe
PEARL	Preparing for Extreme And Rare events in coastal regions
PRA	Participatory flood Risk Assessments
PRONACCH	Programa Nacional Contra Contingencias Hidráulicas
PRONACOSE	Programa Nacional Contra la Sequía
RALCEA	Red Latinoamericana de Centros de Conocimiento en Gestión de Recursos hídricos – Latin-American Network of Knowledge Centres on Water Resources Management
REDICA	Red Centroamericana de Instituciones de Ingeniería/ Central America Network of Engineering Institutions
RHAMA	Consultancy Firm from Brasil
RISC-KIT	Resilience-Increasing Strategies for Coasts – toolkit
RISE-Project	Research and Innovation Staff Exchange
ROA	WMO Regional Office for Americas
SADC	Southern African Development Community
SBP	Support Base Partner
SDC	Swiss Agency for Development and Cooperation
SIDS	Small Island Developing States
TSU	Technical Support Unit
TUHH	Technische Universität Hamburg-Harburg
TUD	Technische Universität Dresden
UNDP	United Nations Development Programme
UNDP-GEF	UNDP Global Environment Facility
UNDP-FYROM	UNDP in the Former Yugoslav Republic of Macedonia
UNECE	United Nations Economic Commission for Europe
UNESCO-IHE	UNESCO Institute for Water Education
UNESCO-IHP	UNESCO’s Intergovernmental Scientific Cooperative Programme in Hydrology and Water Resources
UNISDR	United Nations Office for Disaster Risk Reduction
UNOSAT	UNITAR Operational Satellite Applications Programme
USAID	United States Agency for International Development
USAID-RESILIM	Resilience in the Limpopo Basin Program
USF	University of South Florida
WCARR	UN World Conference on Disaster Risk Reduction
WCRP	World Climate Research Programme
WMO	World Meteorological Organization
WMO HWRP	WMO Hydrology and Water Resources Programme
YRCC	Yellow River Conservancy Commission

1. INTRODUCTION

The Associated Programme on Flood Management (APFM), a joint initiative of the World Meteorological Organization (WMO) and the Global Water Partnership (GWP), was established in order to promote the concept of Integrated Flood Management (IFM) and to help demonstrate the practical steps for putting the concept into practice. The IFM approach aims at maximizing the net benefits from flood plains and minimizing loss of life due to flooding, and at the same time preserving ecosystems within the overall framework of Integrated Water Resources Management (IWRM).

The APFM is currently in its Phase IV. The overall goal of the APFM Phase IV is to **mainstream IFM into practice**, while keeping active the production of guidance materials and maintaining the services provided through the HelpDesk.

The five major areas on which APFM will focus during its fourth phase are:

1. Involvement in the policy field, providing more guidance to assist in promulgation of the policy.
2. Consolidation of the IFM Tools series and other guidance materials, including development of a Primer, acting as an umbrella for the IFM Tool Series.
3. Implementation of the APFM Communication Strategy identifying new channels and opportunities of cooperation, and reinforcing the existing APFM network (including Support Based Partners - SBPs, GWP, WMO Commission for Hydrology and selected past trainees and consultants).
4. Involvement of SBPs, the GWP network and WMO Commission for Hydrology (CHy) resources to reply to requests received through the HelpDesk.
5. Fostering more projects by bringing potential donors to the table.

In line with the WMO Technical Commission for Hydrology (CHy) recommendation to continue promoting the APFM to increase its field effectiveness and to attract extra budgetary resources for its activities, discussions are being held to have the IFM Help Desk considered a Global Framework for Climate Services (GFCS) climate user interface. This would serve the dual purpose of assisting in making some pragmatic modifications to broaden the utility of the GFCS water user interface, possibly adding some new tools or functions to make it more complete in its treatment of water resources related climate adaptation; and at the same time to attract extra budgetary resources to implement APFM activities, particularly in terms of project development.

This Annual Report documents the activities undertaken during the reporting period from 1 August 2014 to 31 July 2015. Most of the output materials are attached as “sub-materials”, which will be made available in one hard copy at the Advisory and Management Committee meeting.

Compared to last years’ reports, this Annual Report will not contain any information about the financial and budget situation of APFM. This is consistent with the decision of the Management Committee in September 2014 to move the financial reporting period to the end of the calendar year, therefore



bringing it in line with WMO financial reporting period. A separate financial report covering the period 1 August 2014 to 31 December 2015 will be developed in the first months of 2016.

With the intent of considerably reducing the size of the Annual Report, the reader is invited to refer to previous Annual Reports (available on the [APFM website](#) archive of reports) for background details about previous publications developed or project proposals.

During the reporting period, the following changes have been made to the staff of the Technical Support Unit (TSU):

- Mr Luis Roberto Silva Vara joined on a voluntary basis the APFM TSU as an intern from mid-July 2014 to the end of March 2015.
- Ms Ranila Rana joined as an intern seconded from the Carlo Schmid programme from mid-October 2014 to April 2015.
- In December 2014, Mr Jan Moritz Krüger, Junior Professional Officer (JPO) that was sponsored by the Government of Germany, left the APFM TSU and WMO moving to another post in Thailand.
- In May 2014, Mr Giacomo Teruggi was appointed Scientific Officer in the WMO Hydrological Forecasting and Water Resources (HFWR) Division, leaving vacant the previous position of Project Officer in the APFM (at 70%) and IDMP (at 30%).
- Ms Sara Oppenheimer Barrot joined on a short-term contract the APFM TSU from May to December 2015.
- Dr Firas Al Janabi also joined the APFM TSU on a short-term contract from June to December 2015.
- In June 2015, Mr Pranav Dhawan joined on a voluntary basis the APFM TSU. Mr Dhawan is expected to end his internship towards mid-September 2015.
- At the end of July 2015, the Secretary position in the APFM, held by Ms Nga Eichrodt, was frozen due to lack of financial resources for the APFM core activities. Ms Mireille Hérin, appointed Senior Secretary in the Hydrological Forecasting and Water Resources (HFWR) Division in June 2015, will also provide secretarial assistance to the APFM.

Moreover, to complement the TSU and ensure implementation of the APFM, IDMP and PEARL Communication Strategies, Ms Isabel Riboldi was hired as a short-term communication officer during the period April-December 2015. The procedure to open a vacancy has been started for the permanent position of communication officer in the Climate and Water Department.

2. ACTIVITIES REPORT 2014-2015

2.1 APFM STRATEGIC PLAN 2014 – 2018 AND RESULTS BASED FRAMEWORK

The APFM Technical Support Unit (TSU) developed the APFM Strategic Plan 2014-2018 to embark on its 4th Phase as per the request from the 2014 APFM AC/MC meetings (see sub material I). The strategy highlights the recommendation from the 2014 APFM AC/MC meeting to mainstream IFM into policy and practice by focusing on supporting countries in the implementation of Integrated Flood Management. In order to achieve this, three key strategic areas were identified. These areas are aligned with both WMO and GWP's guiding principles and they mark the way in which APFM aims to fulfil its tasks, by collecting,

disseminating, and helping implement knowledge on the IFM approach. This is achieved through cooperation with National Meteorological and Hydrological Services, GWP Regional and Country Water Partnerships, national risk management and planning authorities, and SBPs organizations.

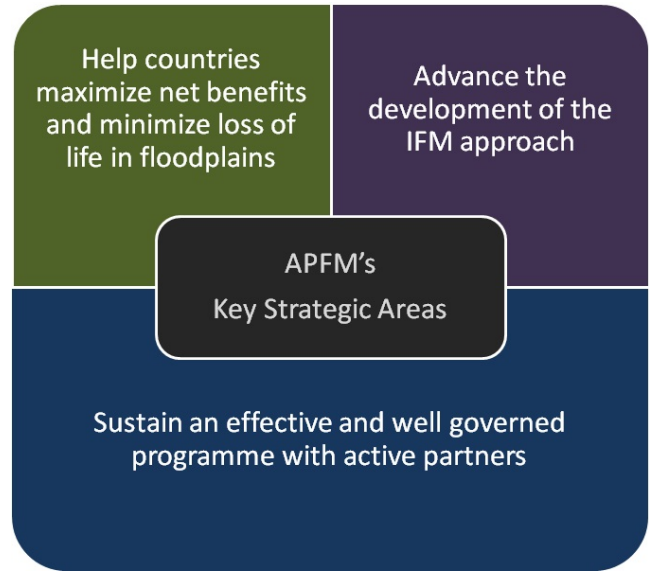


Figure 1 - APFM Key Strategic Areas

The goals of the APFM, derived from the Key Strategic Areas are:

- Help Countries maximize net benefits from the use of floodplains and minimize loss of life.
- Assisting regions, countries and communities in the implementation of IFM.
- Advance the development of the IFM approach.
- Collect and disseminate knowledge on IFM.
- Advocate for IFM
- Sustain an effective and well governed programme with active partners.
- Grow and reinforce a network of partners for cooperation on IFM to increase technical institutional and financial contributions to IFM.
- Efficiently and effectively manage APFM.

The APFM Strategic Plan for 2014 to 2018 has been translated into an activity plan for 2014 and 2015. The APFM results based framework has also been adapted accordingly (see Annex II).

2.2 IFM TOOL AND PUBLICATIONS SERIES

Publication title	Status
IFM Policy Series (sub-materials II)	
Environmental Aspects of IFM – Case Studies (Policy Series)	Contract being issued, starting end of September ¹

¹ More information on that publication is available in section 3.1 of the AC/MC report 2013-2014.



IFM Concept Paper 4 th edition	No progress ²
Economic Aspects of IFM (Policy Series)	No progress ²
Primer	Content being defined
IFM Tool Series (sub-materials III)	
Regulations and Technical Standards for Flood Management	Being finalized ³
Health and Sanitation Aspects of Flood Management	Being edited
The Role of the Media in IFM	Content finalized, in final design
Social Impact Assessment and Public Perception of Flood Risk in IFM	Content finalized, in final design
Effectiveness of Flood Management Measures	Content finalized, in final design
Crisis Mapping and Crowdsourcing in Flood Management	Being written
Flood Management in a Multi-hazard Environment	Dropped
Flood Management in a Changing Climate	Being revised ⁴
Organizing Community Participation for Flood Management	Being revised ⁴
The Role of Land-Use Planning in Flood Management	Being revised ⁴
Formulating a Basin Flood Management Plan	No progress ²
Historical Approaches and Coping Strategies for Flood Management	No progress ²
Project Cycle in Flood Management	In progress ⁵
Loss Assessment Case Studies	Content identified, under development
Asistencia técnica para la preparación de una estrategia de incidencia política (Science-Policy Interface or “How to Talk to Decision Makers)	Being edited and translated from Spanish to English
The Contribution of Geospatial Science to Flood Management	No progress ²
Reservoir Operations and Managed Flows	Being edited
Governance Issues in Flood Management	No progress (no input nor follow up received from UNESCO-IHE on this topic) ²

² The priority level of these documents is to be redefined during AC/MC 2014-2015

³ *Being finalized* means that publications are undergoing the last scientific edition before their content is approved

⁴ *Being revised* refers to the preparation of the publication’s new edition

⁵ This Tool/Training Manual is planned to be developed as part of the IFM Project Preparation Initiative in West Africa. It will build on previous work done by the AMCOW/GWP Water, Climate and Development Programme

Table 1- On-going APFM publications (in order of priority defined during AC/MC 2014)

Other reports:

This year, APFM also contributed to “Water and Climate Change Adaptation in Transboundary Basins: Lessons Learned and Good Practices”, a publication by UNECE. Although not planned in our report series, APFM took this opportunity to collaborate on this important topic. UNECE has agreed to make it available through our Helpdesk.

2.3 CAPACITY BUILDING

2.3.1 Training

2.3.1.1 GWP Course on Integrated Urban Flood Management

As already mentioned during the previous reporting period, GWP jointly with the University of South Florida (USF) is developing a six-module capacity development course on Integrated Urban Water Management, which will provide over the period of several months on-the-job training to key government official in mainstreaming an integrated approach to urban water management. In-depth discussions have been held with the GWP focal point to provide the APFM’s expertise for this activity, and ample material on urban flood management has been shared in 2014. APFM remains available to further support this activity, which is currently being finalized by USF.

2.3.1.2 SADC WaterNet and GWP Southern Africa Training on Integrated Flood Management in Pretoria, 22 - 26 June 2015

SADC WaterNet in collaboration with GWP Southern Africa held a training course on Integrated Flood Management Course in Pretoria from 22 to 26 June 2015. The APFM was approached to support technically the training. The curriculum and associated training material has been made available by the APFM, which was used to train 22 participants from the water ministries in the various SADC Member states as well as academic institutions. A report of the training is currently being prepared. Participants proposed as a follow-up more advanced training and the involvement of other sectors besides water to ensure the implementation of IFM in practice.

2.3.1.3 World Bank e-learning course on the role of land-use planning in disaster management

The World Bank’s Sustainable Urban Land Use Planning e-learning course, active since 2011, is scheduled to take place in its revised and updated form during the incoming November, and then again in March 2016. However, the e-learning still presents the 7 modules originally covered in the 2011 structure, without any mention of land use management and flood risk management.

As already reported last year, APFM was contacted to provide input to the Guide, namely regarding the role of land use planning in disaster risk management, in particular flood management, before, during and after a disaster, and introducing a wide array of policies, tools and practices to address vulnerabilities to flood hazards through risk-sensitive land use planning.



Due to other commitments, neither World Bank nor APFM were able to follow up on this issue, but from recent communications with representatives of the World Bank, it renewed its interest in collaborating with APFM on the topic of urban land use planning in flood management. A draft outline of the course on this topic, titled “Risk-sensitive Land use planning in flood management: A How-to Guide” has been shared with the TSU, and a teleconference to explore the way forward has been scheduled for mid-August 2015.

2.3.1.4 Presentation material

A new presentation on “IFM: from theory to implementation” has been developed based on preliminary discussion about the Primer. Also, a revised version of the presentation on “Effectiveness of Flood Management Measures” has been shared with the TSU by the author, Dr John Labadie, following his presentation at ICFM6 in Sao Paulo. A short presentation on “Flood Forecasting and Early Warning”, based on the IFM Tool with the same title, has been prepared for the UNECE second workshop on Transboundary Flood Risk Management. These three presentations enlarge the portfolio of IFM Tools-related training materials, already comprising “Flood Mapping”, “Community Based Flood Management”, “Role of the Media in Flood Management”, “Urban Flood Management in a Changing Climate” and “Flood Loss Assessment”. Moreover, the full set of available presentations has been translated into Spanish for use in the training course in Cuba (see 2.3.1.8 below).

2.3.1.5 Finalize Training Manual on IFM with CapNet

The finalization of training manuals developed with CapNet on the IFM training manual and facilitator’s guide is still pending. The latest version of the manual was shared by CapNet with the TSU at the last AC/MC meeting in September 2014, but no follow-up has occurred by either party.

2.3.1.6 Training Manual on Community-Based Flood Management

In the framework of the pilot project on Community-Based Flood Management, ADPC is revising the Community-Based Flood Management manual based on the outcomes of the field implementation. A revised table of contents has been shared with the TSU.

2.3.1.7 Training Manual on Gender and Floodplain Management

A Training Manual is to be developed on Gender and Floodplain Management in partnership with the Gender and Water Alliance (GWA). A project proposal is currently being prepared to be submitted to potential donors. The production of the Training Manual will most probably require two workshops: the first one for planning, tasks assignment and drafting a first version of the Manual. This would involve experts mostly from GWA, WMO and GWP. The second workshop would aim at testing the material on its target audiences, which are water managers and professionals.

2.3.1.8 Training course in Havana, Cuba

The training workshop in Cuba, through the RALCEA network (a European Union initiative to create a Latin American Network of Centres of Excellence in Water to facilitate direct collaboration and information exchange between scientific institutions in Latin America) was held from 28 to 31 July 2015. The training course had 25 participants from Cuba, including water resources managers, disaster management authorities, land use planners, and one university professor. The training was conducted jointly by APFM TSU and by Prof. Carlos Paoli of the Universidad Nacional del Litoral in Santa Fe

(Argentina), whose participation was ensured through funding from the Iberoamerican Programme. During the training course reference materials from APFM and other sources were widely distributed. The training course was widely appreciated by participants. They also shared their Cuban flood management and civil defense practices. Experiences on emergency planning, response, and integration of IFM into a legal framework were collected, and these could constitute the basis for further Tool or presentation development.

2.3.1.9 Pilot Virtual Course: IWRM as Climate Change Adaption Tool

A pilot virtual course on IWRM as a Climate Change Adaptation Tool was established by CapNet to test their Virtual Campus platform and discover possible structures, activities, and methodologies which Cap-Net affiliated networks and partners may use for the design and delivery of virtual courses. Up to 20 capacity builders associated with Cap-Net networks and partners, such as the World Meteorological Organisation and UNESCO-IHE, were invited to participate in this pilot course. In addition to their taking the course, participants were asked to review and comment on the course structure, methods used to deliver training, and to make recommendations regarding the technical functionality of the virtual platform.

In addition to testing Cap-Net's Virtual Campus, which is under development, and the methods used to deliver virtual trainings, the course objectives were to present general integrated water resources management (IWRM) and climate change related concepts, and the practical application of IWRM as an instrument to facilitate adapting to climate change. Contents were based on the training material in the form of a manual prepared by Cap-Net in collaboration with WMO, UNSECO-IHE, REDICA, and RHAMA. The course was structured by modules that followed the training manual's chapters. Each module was running over 10 days (1.5 weeks), during which course participants had to read the content and participate in suggested activities. The pilot virtual course has been delivered for a total of 13 weeks, from September until mid-December 2014. Feedback was provided by participants (including the APFM TSU) to CapNet regarding the virtual course.

2.3.1.10 Flood Management Training Course at the Swiss Agency for Development and Cooperation (SDC)

Upon invitation by the Swiss Agency for Development and Cooperation (SDC), APFM held a session on Integrated Flood Management in the framework of a training course on flood risk management. It was organized by the SDC Disaster Risk Reduction Network for its members. This SDC Disaster Risk Reduction network is composed of approximately 60% SDC staff, whereas the remaining 40% comprises external partner institutions such as University of Bern, Swiss and Austrian Red Cross, Terre des Hommes, UNDP, OSCE, UNEP/GRID, Helvetas Swiss Intercooperation and other NGOs. The training course included field visits to Thun, Switzerland, to evaluate measures for lake regulation and debris flow management adopted in the Bern Canton, and in the Matte neighborhood of Bern to assess flood proofing solutions in an urban environment. The course took a place between the 30th of March and the 2nd of April 2015 in Bern, Switzerland.



As a follow up, APFM was invited to join the SDC Disaster Risk Reduction Network to provide expertise and know-how on flood management. Modalities to formalize a mutual cooperation agreement are being considered.

2.3.1.11 Lecture on APFM at the CERG-C/University of Geneva, Geneva, Switzerland

The APFM participated in the event “An exchange with Organizations dealing with disasters”, which was organized by the CERG-C training programme of the University of Geneva on the 29th of April 2015. CERG-C is a specialized certificate for the assessment and management of geological and climate related risk for professionals having a background in earth sciences or civil engineering.

The exchange was intended to bring together different organizations that focus on multiple aspects of disaster risk reduction to present their work to the CERG-C program participants, a group of around 20 scientists from all around the world. While the APFM introduced the concept and principles of IFM, other organizations, such as UNISDR, UNECE, UNOSAT and the Swiss Agency for Development and Cooperation (SDC), introduced further issues related to DRR. The event provided a good opportunity to share different challenges on risk management in the different regions represented in the programme.

It also proved to be helpful in attracting potential interns for the TSU among the CERG-C master course students (a new intern from CERG-C should join the TSU in the second half of September) and in establishing a long-term cooperation with University of Geneva.

2.3.1.12 Develop action Plan on E-learning with TUHH and TUD

Generally, there is no new progress with TUHH in terms of E-learning issues because most of APFM communications with TUHH were focused on the PEARL project. No plan has been developed during the reporting period between APFM and TUHH for the E-learning issues.

On the same matter, contacts have been established with Prof. Dr. Christian Bernhofer (TUD) to include the “Floodmaster course” (<http://intranet.floodmaster.de/>) in the APFM E-learning system as a first step. Further details will be discussed later as TUD is waiting for more information about the work plan of the APFM. Prof. Dr. Christian Bernhofer is the Director of the Meteorology Institute at Dresden University of Technology-Germany, Dean of Research, as well as of the master’s courses on Hydro-science and Engineering, and on Integrated Flood Management.

A meeting with Prof. Dusan Zupka from Geneva Centre for Education and Research in Humanitarian Action (CERAH) - University of Geneva, was held on the 22nd of July 2015 at the WMO Headquarters in Geneva. The purposes of the meeting were to explore possibilities of strengthening the relation between the APFM and the University of Geneva and to discuss possible ways for furthering cooperation in terms of capacity building, publications and consultancy. Prof. Zupka is the coordinator of the Certificate of Advanced Studies in Disaster Management, University of Geneva. The meeting particularly focused on the topics of technical support in risk assessment, disaster response and early warning. A second meeting has been planned to discuss a possible joint workplan.

2.3.2 National and Regional Support Activities

2.3.2.1 Community-Based Flood Management in Iowa, USA

Only one update was received by the TSU from Prof. Marian Muste on the activities of the Inter-Agency Board (IAB) and about the establishment of River Basin Coalitions in Iowa. Currently there are seven River Basin Coalitions established on the model of the Cedar River Basin Coalition. This increase shows that the model of River Basin Coalitions are functioning and meeting the favor of local communities towards a participative approach. The IAB still provides the necessary coordination and technical backstopping to the activities of these River Basin Coalitions.

2.3.2.2 Instrument for Pre-Accession Assistance (IPA) project proposal on flood resilience for the Western Balkans and Turkey and other EC funded proposals

The IPA project proposal to which APFM contributed last year was awarded a grant by the European Commission. However, APFM could not join the Consortium as per the invitation of the Italian Civil Protection Department. This decision reflects the new WMO policy vis-à-vis EC-funded calls: to avoid supporting a proposal by a group of countries/Members which may be in competition against a proposal by a different group of countries/Members, or to avoid supporting activities that go against the interests of some of our Members, WMO will from now on refrain from being involved in consortia for project proposals under any of the EC-funded frameworks (e.g. Horizon 2020, Instrument for Pre-Accession, etc.). In principle, WMO remains interested in supporting Consortia once their proposals have been selected for funding by the EU.

Through a Memorandum of Understanding with the European Commission, WMO is prepared to support EU-funded activities to the extent possible within its capabilities, i.e. upon request of its Members or of the Commission itself. However, WMO (and thus APFM, which does not have an independent legal status recognized by the European Commission) is not in a position to take part to any Consortia for Grant Application processes.

Three requests to join Consortia or advisory boards for Horizon2020 proposals were received during the reporting period, but the only support that could be provided to the requesting party (mostly Support Base Partners, or institutions affiliated with them) was in the form of a generic letter of support.

2.3.2.3 Advancing Ecological and Environmentally Friendly Approaches to IFM

As already mentioned in the previous reporting period, GWP Caribbean contacted the APFM requesting the development of a Small Island Developing State (SIDS) specific knowledge product/ publication looking at Advancing Ecological and Environmentally Friendly Approaches for Integrated Flood Management in Caribbean Island Watersheds. The objectives of undertaking such an activity were to: i) increase awareness on the application of IFM principles for SIDS; and ii) provide a starting point and information resource for future Caribbean IFM demonstration projects. During the reporting period, substantive inputs and guidance for the knowledge product have been provided and contacts to the PEARL project were made available.



2.3.2.4 IFM national consultation workshop and project development in Bangladesh

The Bangladesh Water Partnership requested through the Integrated Flood Management (IFM) HelpDesk support from the WMO/ GWP Associated Programme on Flood Management (APFM). The support had the following objectives: to introduce IFM concepts and tools to the top management of relevant agencies and stakeholders; to analyse the current flood management practices in the coastal zone; to develop consensus on what constitutes an integrated approach to flood management in the coastal zone; to obtain feedback from stakeholders on the current coastal flood management policy and practice; and to develop a pilot project proposal to put an Integrated Flood Management approach into practice in part of the coastal areas of Bangladesh.

The two-day workshop was attended by over 100 participants, including the Minister of Water Resources, Directors from the government agencies dealing with water, national and international civil society organizations, academia and potential financial partners. The presentations and discussion in the workshop elucidated the main flood-related issues in the coastal areas. Two polder areas in the coastal zone were visited by the project team to get a better impression of the issues faced in the coastal area. A first draft for a pilot project proposal has been developed by the Coordinating Committee in Bangladesh; and outreach to financial partners has started by the partners of the Bangladesh Water Partnership, namely the Bangladesh Water Development Board and its Institute for Water Modelling. The APFM has provided comments and will continue to be requested for intellectual backstopping.

2.3.2.5 Support to the development of Strategies of Floodplain Economic Development in the Downstream of Yellow River, Henan Province, China

Following an IFM HelpDesk request from GWP China, two experts from the APFM's Support Base Partners, Professor Philippe Gourbesville of Polytech Nice Sophia, University Nice Sophia Antipolis and Dr Liu Zhiyu, Vice-president of the WMO Commission for Hydrology, supported a series of meetings on strategies for floodplain development. These were organized by GWP China, GWP Yellow River China and the Yellow River Conservancy Commission (YRCC). It provided the opportunity to exchange approaches to address challenges of floodplain management in the lower parts of the Yellow River basin.

2.3.2.6 Mexico

APFM had an assessment mission to Mexico City in the last week of November 2014, together with Prof. Carlos Paoli from the National Water Institute of Argentina. During the one week mission, revisions were made to the Concept Document of the national programme on flood management (called PRONACCH), as well as the 13 prevention plans focusing on hydraulic extremes for the 13 Hydrological Administrative Regions of the National Water Commission of Mexico (CONAGUA). A series of interviews were also performed with relevant actors involved in the development and implementation of the PRONACCH activities, to identify gaps and propose activities in support of PRONACCH. This led to the identification of series of activities that are planned to be implemented in October and November 2015 in synergy with PRONACOSE (the national programme of Mexico on drought management) and IDMP. During a final briefing with MSc Eng. Horacio Rubio, Head of CONAGUA GASIR (Gerencia de Aguas Superficiales e Ingeniería de Ríos – Directorate of surface waters and river engineering) and in charge of the PRONACCH implementation, APFM offered assistance and expertise through its network of Support Base Partners,

particularly in relation to the topic of vulnerability assessment. The mission report of November 2014 (in Spanish) is available as sub-material IV(a).

2.3.2.7 PEARL project

During the reporting period, APFM attended two PEARL project meetings to revise progress and identify shortcomings in the development of the PEARL project. Meeting reports and internal reports about the status of development of PEARL are available as sub-materials. APFM's role is that of leader of Work Package 7, focusing on "Dissemination of project outputs". During the reporting period, APFM developed the internet presence of the project and developed PEARL dissemination products (brochures, poster, etc.). The advances of Work Package 7 are listed in the internal (available as sub-materials IV(b) and IV(c)).

Moreover, APFM organized a PEARL side event on 3 June during the XVII World Meteorological Congress (25th of May until the 12th of June in Geneva), entitled "Reducing Risk and Increasing Resilience in Coastal Areas: PEARL RISC-KIT Projects". In addition, the Early-Warning System for Marbella, Spain and the GIS-based Online Mapping Site for the project's case studies were displayed at the Multimedia Corner.

APFM also actively advocated for PEARL, by presenting a poster session on the project at the 6th International Conference on Flood Management (Sao Paulo, Brazil, from 16 to 18 September 2014) and during the training course in Cuba that was held at the end of July 2015 (see section 2.3.1.8 above).

2.3.2.8 Community Based Flood Management (CBFM) in Thailand and Lao (with ADPC)

The Asian Disaster Preparedness Center (ADPC) submitted its mid-term progress report covering the first implementation phase to December 2014 on the pilot project "Empowering Communities - Community-based Approaches to Flood Management in Thailand and Lao PDR". According to the report, activities are conducted in parallel in Thailand and Lao PDR, even though the latter has a significant delay compared to the first, due to the later than anticipated approval of the project proposal by Lao PDR.

In both of the identified target communities, Participatory flood Risk Assessments (PRA) were conducted through the Hazard, Vulnerability and Capacity Assessment tools involving community leaders and members, including women, elderly, children, and Community Civil Defense Volunteers, as well as officials from provincial and district governments.

In Lao, an everyday training on Community-Based Flood Risk Management took place from 17 to 21 November 2014, whereas in Thailand, they were held from 16 to 17 December 2013, and encompassed the PRA as a field exercise on the provision of flood monitoring and early warning.

The subsequent step in the implementation was the establishment of Community-Based Flood Management Committees (CBFMCs) and the development of community flood management plans and hazard maps. For further information see the interim report from December 2014 available as sub-material IV (d).



2.3.2.9 Advocating for IFM in the Amur Basin River

Although it was not possible to physically attend the Eight International Ecological Forum organized by “Nature without Borders”, APFM contributed to the Forum by having Dr Eugene Simonov (River without Boundaries) making the presentation on a paper entitled “Integrated Flood Management: a multidisciplinary approach to maximize net benefits from the use of Floodplains”, later published in the forum proceedings (available at page 43 of the proceedings, available as sub-material. The report is only in Russian). This event took place in Vladivostok between the 23rd and the 24th of October 2014.

2.3.3 Not started, but planned

2.3.3.1 Project Preparation for the Implementation of Integrated Flood Management for West Africa

The Country Water Partnerships of Benin, Burkina Faso, Cameroon, Cote d’Ivoire, Ghana, Mali, Nigeria and Senegal reached out to the APFM for support in 2013. A series of activities were being planned already in 2014 in response to the expressed need to build capacity on the principles of IFM and support the countries in preparing projects that address their needs. The identified objectives were twofold: (a) to develop the capacity of key personnel in applying the concepts of Integrated Flood Management (IFM) and (b) to prepare projects on IFM in these countries that can attract funding (“bankable projects”). The activities have been grouped into four areas: (1) Flood Management Needs Assessment; (2) IFM Capacity Development; (3) IFM Project Preparation Capacity Development; (4) Project Formulation.

The activity is mutually reinforcing with the African Ministers’ Council on Water (AMCOW) and GWP’s Water, Climate and Development Programme (WACDEP) ongoing work on project preparation. The activities are being jointly organized by the Country Water Partnerships of the countries in partnership with the National Meteorological and Hydrological Services, WMO and GWP as part of the APFM, as well as with the support of Volta Basin Authority (VBA). The African Network of Basin Organizations (ANBO) has been approached, as well as potential financial partners (the Islamic Development Bank and USAID). Financial partners have been contacted to participate in order to (i) ensure that the projects are well-designed and attractive for soliciting financial support from potential donors and (ii) to allow them to consider financially supporting this process.

Despite the advanced status of planning, progress was hampered due to the EVD crisis in West Africa.

Further details on this initiative are provided in a concept note, and guidelines for the Flood Management Needs Assessment have been drafted. Both documents are provided as sub-materials V (a) and V (b). Being the EVD outbreak now under control, the activities can start as soon as funding has been raised. This activity is seen as being central in putting the APFM Strategic Plan 2014-2018 of implementing IFM into action.

2.3.3.2 Transboundary Flood Management issues in the Dniester

The project proposal developed with Zoi Environment and GWP was considered for submission in various occasions to the WMO Resource Mobilization Office. However, the particular geo-political situation of Ukraine made it difficult to meet the approval of potential donors.

2.4 OUTREACH

2.4.1 Newsletter

Since the AC/MC meetings in September 2014, three issues of the Flood Management News have been published (No. 34 in October 2014, No. 35 in February 2015, No. 36 in July 2015, available as sub-material VI(a). They were disseminated through the usual channels, i.e. e-mail (the mailing list now reaching 1677 subscribers), website and social media.

2.4.2 International Events

Since the last AC/MC meetings, the APFM was involved in the following international events:

EVENT	DATE	LOCATION	APFM INVOLVEMENT	PARTNERS INVOLVED
World Water Week	31 Aug-5 Sep 2014	Stockholm, Sweden	Information material disseminated at WMO booth (part of UN-Water pavilion) and GWP booth in the exhibition	WMO, GWP
Sixth International Conference on Flood Management	16-18 Sep 2014	São Paulo, Brazil	2 poster sessions supported by papers; presentation on effectiveness and evaluation of flood management measures; presentation in the plenary session "International Flood Initiative – IFI"	WMO, Dr John Labadie (APFM consultant, author of different Tools)
Eighth International Ecological Forum	23-24 Oct 2014	Vladivostok, Russia	Paper presented by local partner Nature Without Borders	Nature Without Borders
WMO Conference on the Gender Dimensions of Weather and Climate Services	5-7 Nov 2014	Geneva, Switzerland	Support to 2 Working Sessions and to the "High-level Plenary on Climate, Water and Gender Equality"	WMO
Third World Conference on Disaster Risk Reduction	14-18 Mar 2015	Sendai, Japan	Organisation of the "Working Session on IWRM (Floods and Droughts)"; mention in the "High Level Partnership Dialogue: Inclusive DRM; Governments, Communities and Groups Acting Together"; mention in the background brief on "Water and Disaster Risk"	WMO, GWP, UNISDR, FOEN, Delta Commission, UNESCO-IHE
Second Transboundary Flood Management Workshop	19-20 Mar 2015	Geneva, Switzerland	Presentation; moderation of the session on "Flood Forecasting"; discussion leading in breakout groups	WMO, UNECE
Seventh International Conference on Climate Change: Impacts and Responses	10-11 Apr 2015	Vancouver, Canada	Presentation	Dr John Labadie (APFM consultant,



				author of different Tools)
Partners in Emergency Preparedness Conference	14-16 Apr 2015	Tacoma, WA, USA	Presentation	Dr John Labadie (APFM consultant, author of different Tools)
XV World Water Congress of IWRA	25-29 May 2015	Edinburgh, UK	Presentation in Special Session 4; presentation in Special Session 34	WMO, University of Dundee, CEH
Seventeenth World Meteorological Congress	25 May-12 June 2015	Geneva, Switzerland	Organisation of 2 side events (on APFM and on the PEARL project); information material disseminated at the exhibition; PEARL project's applications displayed at the Multimedia Corner	WMO, GWP

Table 2 - List of international events in which APFM was involved

2.4.3 Articles and Other Outreach Materials

Article on Water Policy Journal, issue 17, 2015

An article entitled “Integrated policies and practices for flood and drought risk management” was published as part of a special edition of the Water Policy Journal initiated by the High-level Experts and Leaders Panel on Water and Disasters. The article highlights the APFM and IDMP approaches. It is available as sub-material VI (b) or at: <http://www.iwaponline.com/wp/017S1/0180/017S10180.pdf>

Article on Latin America Geospatial Portal on case study by UNOSAT

The article entitled “Adapting to climate change: The case of Santos Harbor metropolitan area (Brazil)” was published on 23 February 2015. Its aim was to give a practical example of how geospatial sciences can contribute to the development of policies for adaptation to climate change. The Latin America Geospatial Portal is a website of Geospatial Media and Communication where users can access a wide variety of information related to geospatial products and issues. Since the portal is available in English, Spanish and Portuguese, the article was translated into the three languages. The article is available as sub-material VI(d) or at:

[http://lagf.org/ArticleDetails/?ARTID=31454&LID=EN&Act=view&title=Adapting%20to%20climate%20%20change:%20The%20case%20of%20Santos%20Harbor%20%20metropolitan%20area%20%20\(Brazil\)](http://lagf.org/ArticleDetails/?ARTID=31454&LID=EN&Act=view&title=Adapting%20to%20climate%20%20change:%20The%20case%20of%20Santos%20Harbor%20%20metropolitan%20area%20%20(Brazil))

Post in the World Bank’s Development Dialogue on Urban Flood Risk Management

In February 2015 the APFM intervened in the online conversation “Development Dialogue: Urban Flood Risk Management” (<http://strikingpoverty.worldbank.org/conversations/development-dialogue-urban-flood-risk-management>) on the World Bank’s website “Striking Poverty”

(<http://strikingpoverty.worldbank.org/>), an online space dedicated to debates on development problems. The post explains the APFM’s approach to urban flood management and lists the programme’s most relevant publications.

Guest Editor initiative by UNISDR

The Guest Editor initiative is a collection of articles published on Prevention Web, the UNISDR’s web platform for the disaster risk reduction community. The editorials are written by experts who give their view and recommend key readings and events on a specific aspect of DRR. The APFM contributed to the initiative with an article about “Social aspects of flood management: from communication of flood risk to Social Impact Assessment and stakeholders’ involvement”, which was issued on 13 April 2015 (available at <http://www.preventionweb.net/experts/guest/collection/43568>).

Quote on the Journal of the Taiwan Disaster Prevention Society

Prof. Aldo Marrocco from the University of Pisa (Italy) published an article entitled "Educational and informative web resources about ecosystem services that diversified agricultural landscapes may provide: Conservation Biological Control and Natural Disaster Mitigation" in the Journal of the Taiwan Disaster Prevention Society. The article includes a picture provided by the APFM and quotes the programme.

2.4.4 Website

APFM’S WEBSITE

On 23 March 2015, a new APFM website was launched. It is built on a different WordPress theme, which facilitates the update of pages.

The migration has positively affected the number of visits. In fact, the total number of visitors during the reporting period 2014-2015 was of 39,877 (+73% compared to 2013-2014), with an increase in the amount of sessions starting from March 2015. Furthermore, 84,7% of the users are new visitors.

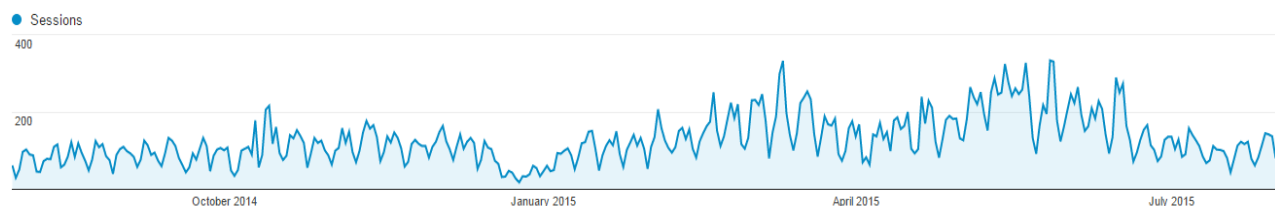


Figure 2 - APFM website visits for the period 2014-2015

To address the issue of low access by non-English-speaking countries highlighted in last AC/MC meetings, a section in Spanish was added. It includes basic information on the concept of IFM and some publications translated or originally drafted in Spanish.

As discussed during AC/MC 2014, the new website includes all the material available in the old Reference Centre Database, supplemented by a disclaimer informing that the catalogue is no longer being updated and inviting users to contact the TSU for specific needs.



PEARL PROJECT'S WEBSITE

The APFM continues maintaining the PEARL project's website, including new information, products and publications sent by partners. There were 6,273 visitors during the reporting period (1 August 2014 to 31 July 2015). These are not represented within the overall visits to the APFM website.

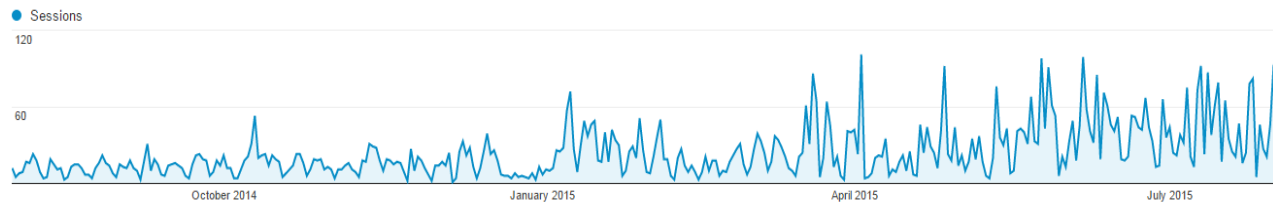


Figure 3 - PEARL website visits for the period 2014-2015

2.4.5 Social Networks

APFM'S PROFILES

The APFM profiles on social networks (Facebook, Twitter and LinkedIn) continue to be successful means to improve the programme's outreach. As shown in the table below, all three have registered a remarkable increase in the number of followers.

SOCIAL NETWORK	FOLLOWERS	TREND from 1 August 2014
Facebook	864	+54% (+303)
Twitter	152	+97% (+75)
LinkedIn	332	+28% (+73)

PEARL PROJECT'S PROFILES

As part of its tasks in the PEARL project, the APFM keeps managing the project's profiles on Facebook, Twitter and LinkedIn. These, as well, have recorded an increasing number of subscribers.

SOCIAL NETWORK	FOLLOWERS	TREND from 1 August 2014
Facebook	145	+95% (+71)
Twitter	60	n.a.
LinkedIn	34	+48% (+11)

2.4.6 Catalogue of Services available through the IFM HelpDesk

The development of a catalogue of the services and resources that the APFM is able to provide through its SBPs was started in the last months of 2014. The TSU is gradually approaching all Support Base Partners to prepare a comprehensive list of the workshops, training courses, tools and resources that they can contribute to the HelpDesk, including details about objectives, target audience, duration, costs, proposed agenda, among others. Once finalized, the Catalogue will be available on the APFM website, downloadable in pdf format, and in hardcopy for dissemination to potential donors, users and partners.

2.5 IFM HELP DESK

2.5.1 Institutional arrangements and mechanism for the IFM HelpDesk

Two new Support Base Partners (SBPs) have joined the IFM Help Desk during the reporting period. They are the German National Committee for UNESCO IHP and WMO HWRP and the Centre for Ecology and Hydrology of the United Kingdom. The German National Committee for the International Hydrological Programme (IHP) of UNESCO and the Hydrology and Water Resources Programme (HWRP) of WMO was established in 1974. Members of the Committee are representatives of German Ministries, of the national operational hydrological services as well as researchers and academicians. The Committee is chaired by the Federal Foreign Office and meets once a year in Berlin. The work of the IHP/HWRP Secretariat, which is responsible for day-to-day operations, is mentored by a scientific advisory board. The Secretariat is hosted by the Federal Ministry of Transport, Building and Urban Development on the premises of the Federal Institute of Hydrology in Koblenz (BfG).

The UK Centre for Ecology & Hydrology (CEH) is a world-class research organisation focusing on land and freshwater ecosystems and their interaction with the atmosphere. CEH is a public-sector research centre, part of the UK Natural Environment Research Council (NERC). The SBP agreements are being finalized at the time of preparation of this annual report.

Preliminary discussions are underway regarding the possible inclusion in the SBP network of other institutions such as the University of Geneva (CERAH), TU-Dresden, the International Commission for Irrigation and Drainage (ICID), Universidad del Litoral in Santa Fe (Argentina), Roorkee University (India) and Rivers without Boundaries (RwB).

2.5.2 Operational Status of the IFM HelpDesk

Only seven requests were received through the HelpDesk website during the reporting period. The apparent low number of requests has been offset by the increase in the direct number of requests received by the TSU through personal contacts (16 requests) or through WMO (9 requests) or GWP (4 requests). This possibly shows that users prefer “a human touch” rather than completing and submitting an on-line form through the HelpDesk.

3. ACTIVITY PLAN FOR THE PERIOD 2015/2016

3.1 POLICY SERIES AND IFM TOOLS

This year, APFM will focus on the finalization of planned Tools, including publications for which less priority has been assigned during AC/MC 2014 meeting. Also, unless urgent or highly priority topics are identified, the priority will be on updating existing ones preparing new editions with up-to-date and more extended content.



3.2 TRAINING

3.2.1 Paraguay

APFM was invited by the Permanent Representative to facilitate sessions on IFM at the Paraguayan Conference on Water Resources, in Asuncion from 5 to 7 August 2015. The conference will be preceded on 3 and 4 August by a series of lectures to students of the National University of Asuncion with backgrounds ranging from civil and environmental engineering to agronomy and economics. A keynote lecture on IFM is also planned to take place on the first day of the Conference.

APFM involvement also allows an opportunity to renew contacts and revive concepts introduced in Paraguay during the training delivered in October 2011. It also provides an opportunity to support the WMO Regional Office for the Americas on issues related to flood management and hydrology in general.

3.2.2 Argentina

Following the training course in Cuba, delivered jointly with Prof. Carlos Paoli and Prof. Marta Paris from University of Santa Fe in Argentina, an invitation has been issued to APFM to attend and provide support facilitating the Master's Course on IFM, organized by the University of Santa Fe for the first half of 2016. This Master's course, based on materials developed by APFM, is part of the University of Santa Fe syllabus and is scheduled every two years. A first invitation to participate in the facilitation of this Master's course was issued in 2012, but due to unforeseen circumstances at the time APFM could not participate directly. Attendance to this Master's course could serve a double purpose: the first is an opportunity to assess the quality of the Master's course on IFM, and evaluate its repeatability in other universities (not necessarily Spanish speaking); the second is that it would help strengthen the linkages with University of Santa Fe and the RALCEA network (see section 3.5 -1 below for further information).

3.2.3 ICID Training Workshop for Young Professionals on Integrated Flood Management

In the framework of the 26th Euro Mediterranean Regional Conference, to be held back-to-back with the ICID 66th International Executive Council, APFM has been invited to facilitate a Training Workshop for Young Professionals on Integrated Flood Management on 15 October 2015 in Montpellier, France. Prior to the workshop, APFM will also attend ICID Working Group meetings on Adaptive Flood Management, Drought and Climate, scheduled on 13 and 14 October, respectively.

3.2.4 Workshop on Flood Risk Management for the Sava River Basin

The International Sava River Basin Commission (ISRBC) is organizing with the UNESCO Office in Venice a workshop on Flood Risk Management, to be held in Zagreb towards the end of 2015 (tentatively November or December). The workshop was originally planned to take place in May 2015, on the occasion of the first anniversary of the floods that hit Serbia and Bosnia-Herzegovina in May 2014. A request to support and participate in the workshop was sent to WMO by the ISRBC. The workshop provides an opportunity to mainstream in the region the IFM concept.

3.2.5 E-learning

A teleconference is scheduled for mid-August with the World Bank representatives to discuss about the way forward on the e-learning platform on land-use planning for flood management. This would also offer the opportunity to increase linkages with other World Bank e-learning platforms, such as the one on urban flood management. This platform was developed on the basis of the publication “Cities and Flooding: A Guide to Integrated Urban Flood Risk Management for the 21st Century” (APFM contributed to the development of this guide in 2011).

On a similar topic, whereas specific e-learning platforms will need to be developed in the framework of PEARL on coastal flood management (together with relevant PEARL partners such as National Technical University of Athens, DHI, UNESCO-IHE, TUHH, etc.), other possible cooperation on this topic are being considered with TU Dresden.

3.3 NATIONAL AND REGIONAL SUPPORT ACTIVITIES

As part of the strategic plan 2014-2018, the general recommendation is to support the implementation of national, regional and transboundary approaches to integrated flood management. This includes the identification of needs, the proactive involvement of national/regional actors, as well as the APFM technical support, also through its Support Base Partners, in the identification and implementation of integrated flood management measures.

Moreover, the role of the APFM is to assist building capacity and to support the country in formulating a project that has the potential of attracting funding (“bankable project”). This approach builds the capacity for flood management and project preparation. It aims to draw on the expertise developed as part of the African Ministers’ Council on Water (AMCOW) and GWP’s Water, Climate and Development Programme (WACDEP) to support institutions to better conceptualize projects and address the bottlenecks and constraints.

This approach is currently being developed for West Africa (see section 2.3.3.1), and similar initiatives involving other countries or regions may follow suit.

3.3.1 Paraguay

Linked to the request for a training course in the Paraguayan Conference on Water Resources is also the request to support WMO Regional Office for Americas (ROA) and the Paraguayan Meteorological and Hydrological Directorate (DINAC) in developing an integrated flood management strategy for Paraguay. This would entail coordinating with the ROA for the development of 2-day training modules for disaster management authorities at the provincial and local levels, and provide technical supervision in the development and implementation of the strategy.

3.3.2 Mexico

It is expected that support will continue to be given to CONAGUA in the development of the national programme on flood management (PRONACCH). For the next reporting period, this would translate into the organization of workshops focusing on: a) evaluation of social vulnerability; b) flood hazard, vulnerabilities and risk assessment in relation to flood losses; c) flood risk mapping; and d) applying the methodology for assessing the legal framework for application of IFM.



A preliminary date to hold these workshops has been set around the end of October or beginning of November, having two week duration.

3.3.3 CBFM in Thailand and Laos

A Monitoring and Evaluation visit is planned to take place in August 2015 in selected locations both in Thailand and Lao PDR. The pilot project is normally scheduled to come to an end on 31 December 2015, but it is foreseen, in light of the delays in the project' inception (especially in Lao PDR), that the project will benefit from a no-cost extension of six months.

3.4 OUTREACH

The implementation of the APFM's Communication Strategy will continue as usual in 2015/2016. In particular, it will include:

- Newsletter: 3 issues will be published, possibly in September/October 2015, January/February 2016 and May/June 2016.
- International events:
 - World Water Week, 23-28 August 2015, Stockholm, Sweden: dissemination of information material at the UN-Water, GWP and USAID booths.
 - COP21:
 - Any other relevant international event related to flood and water resources management, depending on the pertinence and significance of the event and the availability of human and financial resources to contribute to it.
- Articles and other outreach activities: contacts have already been established with the editorial team of the website Floodlist.com to explore the possibility of publishing articles on the APFM' pilot projects and PEARL's case studies. Further opportunities to promote the programme through online and hardcopy resources will continuously be sought.
- Website and social media: the APFM's and PEARL's websites and social media profiles will be regularly updated to include latest developments. Once the Catalogue of Services will be finalized, the HelpDesk will be restructured to embed it in a user-friendly fashion.
- Catalogue of Services: it will be finalized and made available online through the HelpDesk by the end of 2016. Following this, a folder containing a general brochure and SBPs factsheets will be developed.
- A new APFM roll-up banner will be produced in conformity with the new visual identity. Two items will be purchased, one to be kept in WMO headquarter in Geneva, while the other to be delivered to the GWP Secretariat in Stockholm.

3.5 IFM HELP DESK AND CATALOGUE OF SERVICES

The HelpDesk will continue to operate as in previous reporting periods. Once the catalogue of services has been finalized (see section 3.4 above), it is expected to have an increase in quantity (and also quality) of requests received, as users would have a clearer picture about the facilities and expertise available through the HelpDesk.

In terms of new SBPs, discussions are currently undergoing with seven institutions:

- 1) FICH/UNL (Facultad de Ingeniería y Ciencias Hídricas/Universidad del Litoral - Faculty of Engineering and Hydro-sciences of the Litoral University) and RALCEA (Red Latinoamericana de Centros de Conocimiento en Gestión de Recursos hídricos – Latin-American Network of Knowledge Centers on Water Resources Management), a.k.a. University of Santa Fe, Argentina: relations with FICH have been ongoing since 2008, when Prof. Carlos Paoli attended the IFM training of trainers in Lima. His participation led to the inclusion in his university’s syllabus of a specific course on IFM, and to his involvement in different APFM activities in Latin America (Paraguay training in 2011, Mexico training in 2013 and evaluation mission on the PRONACCH in 2014). As stated in section 3.2.2 above, inclusion of FICH in the SBP network would serve to recognize the active role this institution played in disseminating the IFM concept, replicating IFM trainings in South America, and setting up a specific university course on IFM. Moreover, being FICH part of RALCEA (Red Latinoamericana de Centros de Conocimiento en Gestión de Recursos hídricos – Latin-American Network of Knowledge Centers on Water Resources Management) it could identify and propose further possibilities for disseminating the IFM concept through joint activities like the training course in Cuba (see section 2.3.1.8), reaching out not only to academic counterparts in Latin-America but also to practitioners and national authorities.
- 2) University of Geneva: contacts have been established independently with different programmes/faculties of Geneva University.
 - a. CERG-C (Specialization certificate for the assessment and management of geological and climate related risk) is a programme taking a multidisciplinary approach to the assessment and management of risk from natural hazards, merging ideas from disciplines such as the physical and social sciences, engineering, and economics. Potential synergies could include disseminating the IFM concept among CERG-C students, while at the same time hosting interns from CERG-C in the framework of their end of specialization internship, and identifying topics of common interest to revise or produce IFM Tools.
 - b. CERAH (Centre for Education and Research in Humanitarian Action) is the humanitarian platform in Geneva’s academic environment, offering a variety of training and diplomas as well as conducting multi-disciplinary research on topics of humanitarian action. Also in this case, potential cooperation would entail delivering trainings to the CERAH students, as well as identifying possible research topics of mutual interest and attracting interns to the TSU.
 - c. Geneva Faculty of Law has a particular interest in transnational cooperation and water law, and could therefore constitute a second SBP to assist on legal and institutional issue in addition to the Dundee Centre for Water Law.

The establishment of a framework agreement with the University of Geneva would simplify the involvement of specialized experts in APFM activities.
- 3) ICID (International Commission of Irrigation and Drainage): similar to the case of FICH and RALCEA, cooperation with ICID (with whom WMO already has a framework agreement) could



lead to the organization and development of training courses to selected irrigation and drainage specialists. The case of Montpellier in 2015 (see section 3.2.3) and of Mardin in 2013 are good examples of this synergy.

- 4) IIT Roorkee (Indian Institute of Technology Roorkee): to complement the above initiative in Latin-America (see point 1 of this list), cooperation with IIT Roorkee University could be explored with the aim to establish a specific university course on IFM in English, and to play the role of IFM concept replicator in the region, in a similar way to what FICH is doing for Latin-America.
- 5) River without Boundaries: environmental aspects of flood management are often neglected, especially in developing countries or in countries with economies in transition. Bringing forward the topic of ecosystem conservation and river restoration, River without Boundaries advocates for a basin-level approach to flood management. It also constitutes a potential key resource in further disseminating and translating APFM materials in Russian and Chinese.

LIST OF ANNEXES

ANNEX I – List of IFM HelpDesk Requests

ANNEX II – APFM Logframe

ANNEX III – Checklist of recommendations of last AC/MC meeting