

ANNUAL REPORT

2019-2020



Date issued
October 2020

Report APFM
Report No. 47



WORLD METEOROLOGICAL ORGANIZATION

The World Meteorological Organization (WMO) is a specialized agency of the United Nations. It coordinates the activities of the meteorological and hydrological services of 193 countries and territories and is the authoritative voice on weather, climate and water.



ASSOCIATED PROGRAMME ON FLOOD MANAGEMENT

The Associated Programme on Flood Management (APFM) is a joint initiative of the World Meteorological Organization (WMO) and the Global Water Partnership (GWP). Since 2001 it promotes the concept of Integrated Flood Management (IFM) as an approach to flood management.



GLOBAL WATER PARTNERSHIP

The Global Water Partnership (GWP) is an international network whose vision is for a water secure world. The GWP mission is to advance governance and management of water resources for sustainable and equitable development. Created in 1996 the GWP network is open to all organizations that recognize the principles of integrated water resources management endorsed by the network.

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Executive Summary

This Annual Report documents the activities undertaken during the reporting period 01st August 2019 to 31st July 2020.

The Associated Programme on Flood Management (APFM), a joint initiative of the World Meteorological Organization (WMO) and the Global Water Partnership (GWP), has continued to implement and support Integrated Flood Management (IFM) concept and strategies globally. During last year, the APFM Technical Support Unit (TSU) has been active in developing opportunities and providing expert services to apply the IFM concept in practice, jointly with the Support Base Partners (SBPs). The IFM HelpDesk remains instrumental in offering technical assistance to the HelpDesk users requiring Integrated Flood Management strategies and approaches.

The implementation of activities under the framework of the Volta Basin Flood and Drought Management are on-going, however some of the activities planned in the first year of the project have been postponed to later dates due to travel restrictions imposed by the COVID-19 pandemic.

The APFM TSU has also been supporting the activities of the CHy. It has to be noted that the CHy ceased to exist (in the framework of the WMO Constituent Bodies Reform) until 31 December 2019. To cover similar functions, WMO has established a Standing Committee on Hydrology (SC-HYD), Standing Committee on Disaster Risk Reduction and Public Services (SC-DRR) and Study Group on Integrated Urban Services (SG-URB) under the Commission for Weather, Climate, Water and related Environmental Services and Applications (SERCOM); a Standing Committee on Observation Network (SC-ON), Standing Committee on Measurements, Instrumentation and Traceability (SC-MINT), Standing Committee on Information Management and Technology (SC-IMT), Study Group on Data Issues and Policies (SG-DIP) and Standing Committee on Data Processing for Applied Earth System Modelling and Prediction & Projection (SC-ESMP) has been established under the Commission for Observation, Infrastructure and Information Systems (INFCOM). To coordinate the hydrological topic between the two Commissions and the other Constituent Bodies (i.e. the Research Board and the six Regional Associations), a Hydrological Coordination Panel (HCP) composed by 25 experts has been established under the WMO Hydrological Assembly, which meets during Congress and is composed by the Hydrological Advisors of the 193 WMO Members, mainly the development of the End-to-End Early Warning Systems for Flood Forecasting (E2E-EWS-FF) Community of Practice (CoP), the drafting of the Flood Risk Mapping Manual, and the development of guidelines to assess national requirements and capabilities for End-to-End Early Warning Systems for Flood Forecasting, testing the assessment approaches in various countries through WMO initiatives including in the projects of the Climate Risk and Early Warning Systems (CREWS) initiative. At the same time, the APFM TSU provided technical expertise to various other on-going initiatives of WMO and GWP.

Mr Frederik Pischke has left the APFM TSU from April 2020, moving on to his next position with the International climate team of the German Federal Environment Agency (Umweltbundesamt - UBA). The TSU is grateful for his continuous support and contribution to the activities of the APFM and the professionalism shown during his 5 years of work tenure as a seconded staff from GWP.

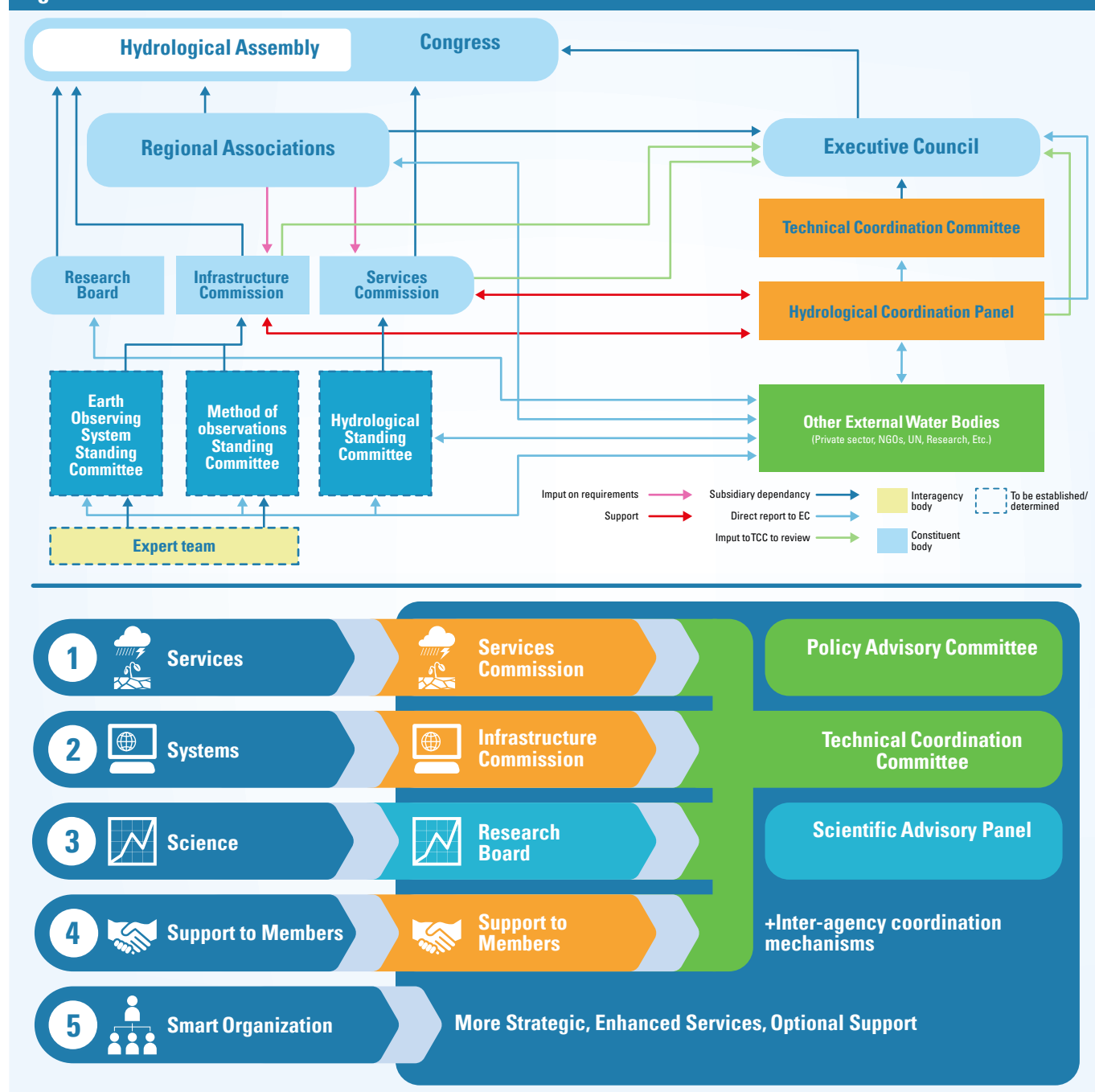
APFM Institutional development (Position of APFM in new WMO constituent body reform)

The last reporting period has seen the successful implementation of the WMO Constituent Body Reform (CBR), as summarized in the previous section, with the goal of aligning WMO governance and working structures with the WMO Strategic Plan 2020-2030. While a WMO Vision and Strategy for hydrology with its associated Plan of Action is being developed by HCP, the APFM has been aligned since last Congress (see Res. 24, Cg-18; and Res. 5, EC-71) under the WMO major hydrological initiative related to 'Flood Forecasting Initiative and the contribution to disaster risk management including



Flood (APFM) and Drought (IDMP)'. APFM has also been aligned under the WMO Long Term Ambition on hydrology "No one is surprised by a flood".

Figure 1- WMO Constituent Bodies Reform



To reflect these changes, the APFM "constitution/governance structure" has been amended accordingly, especially concerning the representation of WMO in the Support Base Partners Forum: previously the President of CHy and one advisor; currently the Chair of HCP and one advisor.

The [Hydrological Coordination Panel](#) (HCP), Chaired by Dr Jan Danhelka, has appointed Prof Marcelo Uriburu Quirno to oversee the APFM activities. Prof Marcelo Uriburu Quirno has also been nominated Vice-Chair of the SC-HYD during the first Joint Technical Commissions virtual meeting held in April 2020.

The Hydrological Coordination Panel is the WMO think tank on hydrology and promote activities in operational hydrology and to further build close cooperation between Meteorological and Hydrological Services. It supports and advises on an integrated delivery of WMO water-related activities and undertakes

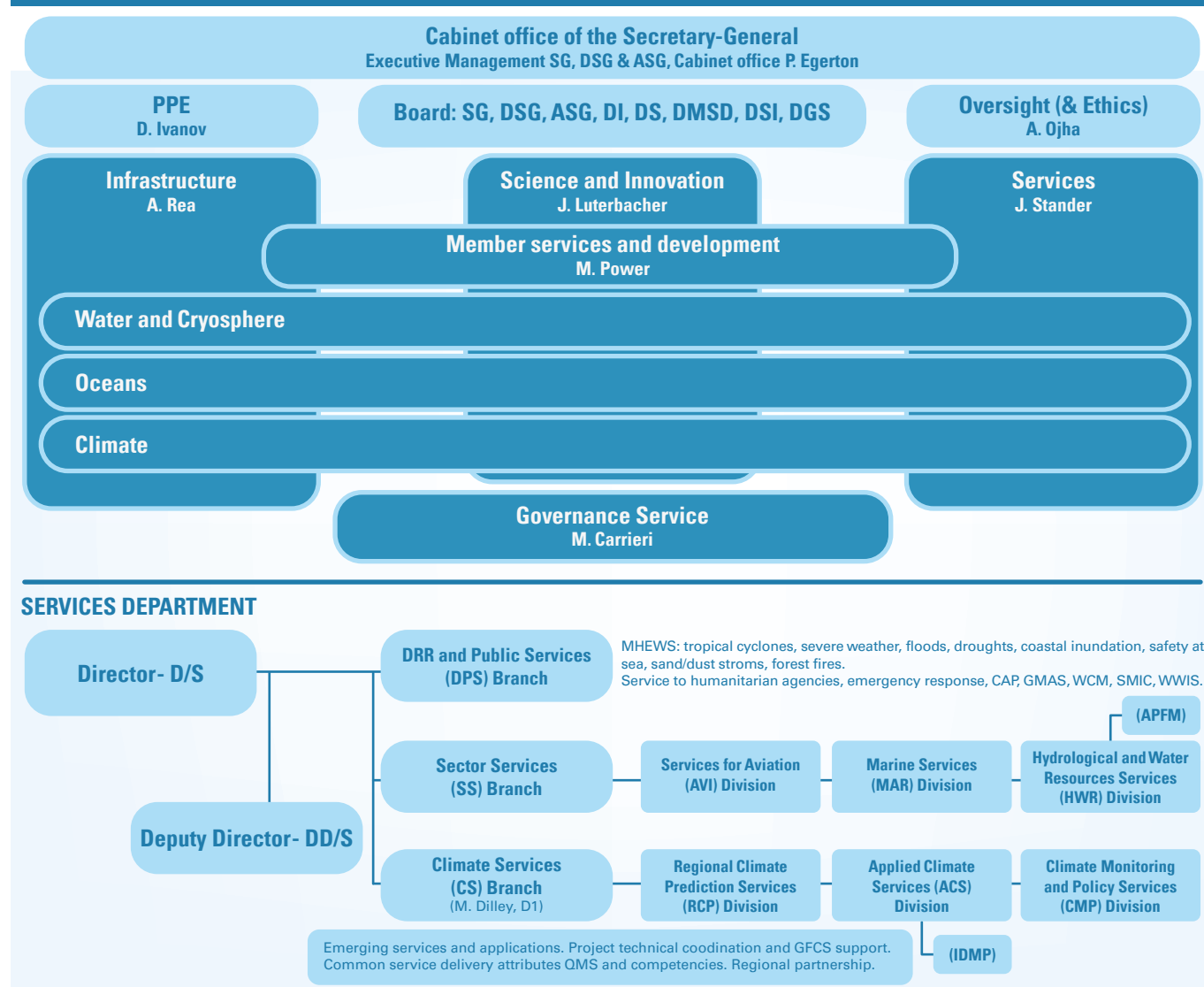


preparatory work for the Hydrological Assembly. It is chaired by Dr Jan Danhelka and has appointed Prof Marcelo Uriburu Quirno to oversee the APFM activities. Prof Marcelo Uriburu Quirno has also been nominated Vice-Chair of the SC-HYD during the first Joint Technical Commissions virtual meeting held in April 2020.

As decided during the World Meteorological Congress in 2019, an Extraordinary Congress on Water will be held in 2021, mainly to discuss the progress on the WMO Vision and Strategy for hydrology development, and the work plans for the eight WMO Hydrological Long-Term Ambitions. As such, APFM activities linked to the long-term Hydrological ambition 'No one is surprised by a flood' will be highlighted during Congress in 2021.

Reflecting the CBR, WMO has undergone a Secretariat reform. As of 31 December 2019, the Climate and Water Department is no more in place, and its hydrology-related Divisions have been distributed between the Services Department, the Infrastructure Department, and the Coordinator for Water and Cryosphere. In this WMO Secretariat reform, APFM is currently placed under the Hydrology and Water Resources (HWR) division of the Services (S) Department, Special Services (SS) Branch.

Figure 2- WMO Secretariat Reform and positioning of APFM



In reference to the above, the existing Letters of Engagement (LoE) between WMO and the APFM Support Base Partners (SBPs) need a revision to better reflect the CBR and the Secretariat reform. This

process has already started with some of the partners, and it provided also the opportunity to identify further linkages and new areas of cooperation under the new different WMO subsidiary bodies and for achieving WMO long-term ambition 'No one is surprised by a flood'. Also, the new LoE will be co-signed between WMO, GWP and SBPs, effectively and officially broadening the agreement between the two APFM Co-Sponsoring Institutions and the SBP network. This will help SBPs to have a wider scope of collaboration and agreements simultaneously with both WMO and GWP.

While updating and signing the LoE with existing SBPs, the TSU took the occasion to formalize the participation of new SBPs, such as Caritas Switzerland, WYN, IUCN with the below areas of cooperation.

Name of the SBPs	Areas of cooperation
Caritas Switzerland (CaCH)	<ul style="list-style-type: none"> - Weather, water and climate services for the rural poor - Hydro-Met observations to improve flood forecasting and Early Warning System - Joint project proposal development under the overall scope of the IFM
WaterYouth Network (WYN)	<ul style="list-style-type: none"> - Communication and outreach support - IFM pilot projects, training and workshops
International Union for Nature Conservation (IUCN)	<ul style="list-style-type: none"> - Environmental and Ecosystem services - Joint Project proposal development
International Rainwater Harvesting Alliance (IRHA)	Discussion on-going

The new LoE template has been prepared for developing joint partnerships and collaboration between WMO, GWP, the existing SBPs (listed currently under [the SBP webpage](#)) and the new APFM SBPs for supporting the IFM HelpDesk and activities of APFM. The LoE template is currently shared with the existing and new SBPs for mutually agreeing the areas of cooperation (para 5 in the LoE document). Once the cooperation agreement is reached, the LoE will be signed by the three organizations representatives (i.e. WMO, GWP and the relevant SBP).

Implementation of the APFM Business model

The APFM TSU continued the implementation of the new Business Model, providing expertise and services (through the TSU and/or the SBP network) to requesting parties on a cost-recovery basis. The main services provided were related to technical assistance and guidance on developing strategies (conducting needs and capabilities assessments) for IFM approaches. These activities were either financed directly by the requesting institutions (e.g. World Bank, Inter-American Development Bank, Expertise France) or by third-party donors (e.g. Adaptation Fund for the VFDM project) (detailed information on the requests is provided below). APFM has also assisted requesting parties to identify possible donors or securing funding through submission of project proposals to specific financial partners on the implementation of E2E-EWS-FF and IFM in general at national or transboundary levels.

The APFM TSU, together with the SBPs, continues to respond using integrated flood management approaches, to requests coming from the NMHSs and other key stakeholders managing floods and drought events (in cooperation with IDMP). As previously highlighted, the APFM Business model, based as much as possible on a cost-recovery principle, will be adopted for every type of activity, aiming to apply IFM tools and methodologies in practice (see Fig.3). These activities include the development of project proposals, the provision of technical assistance, and linkages with other WMO, GWP or SBPs activities. Core support through resource mobilization and outreach remain on the agenda, but in the light of the shortage of resources (which can be expected to be exacerbated by the pandemic socio-economic consequences) it was decided not to focus on this to ensure sustainability to the APFM. The TSU continues to be operating through financial and in-kind support from WMO and GWP. The TSU is directly engaging SBPs at all phases of project proposal development and implementation, ensuring also synergies and avoiding duplication of efforts.

Figure 3-Main areas of the APFM business model

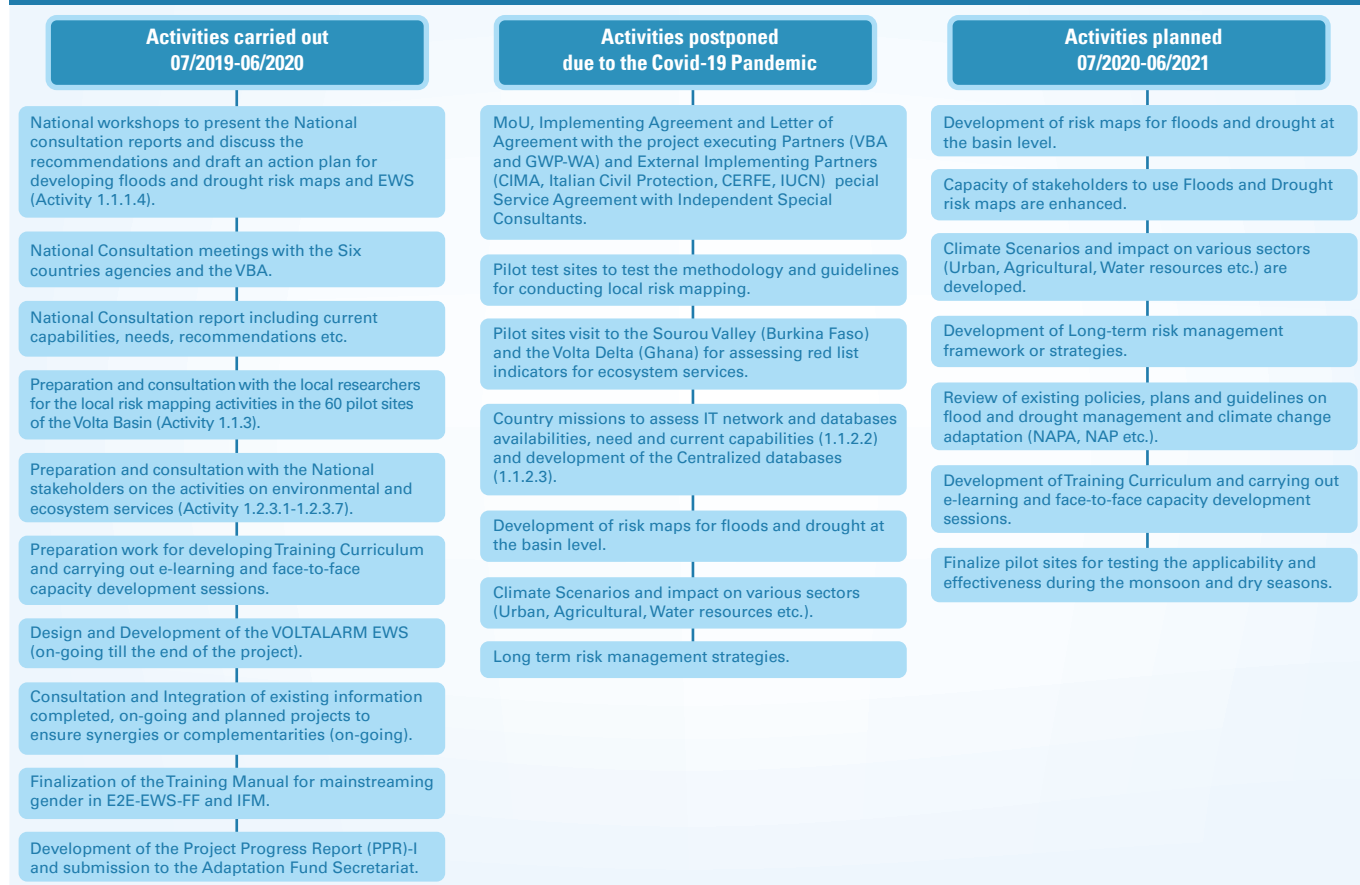


Volta Flood and Drought Management (VFDM) Project (October 2019-June 2020) and the way forward

The APFM TSU continued the implementation of the VFDM project activities together with other Executing Partners (Volta Basin Authority and Global Water Partnership-West Africa) and External Implementing Partners (CIMA, Italian Department of Civil Protection, CERFE, IUCN) and active participation and engagement of the National Services. However, due to the on-going global covid-19 situation, many of the activities planned (involving travel to the countries) in the first year of the project were postponed to the last quarter of the year 2020 or will be conducted virtually in agreement with the National services. Also, in case travel restriction continues, many of the activities such as National workshops, local risk mapping in 60 sites etc. will be carried out by the above-mentioned Executing Partners or local consultants.

The APFM TSU submitted the first project progress report (PPR) to the Adaptation Fund Secretariat during the first week of July 2020 highlighting the achievements, challenges and risks encountered during the implementation. Once the PPR report is approved by the Adaptation Fund Board, the funds for second year activities will be made available to the Implementing Partner (WMO) of the project.

Figure 4-VFDM activities completed, ongoing and planned until December 2020.



Provision of Expert Service and Proposal Development

Inter-American Development Bank (IDB): The APFM TSU continued providing support (together with WMO HydroHub) to the formulation of a project proposal for the Inter-American Development Bank (IDB). The purpose of this project is to perform hydrological assessments in Costa Rica and Panama. The work agreement is currently being finalized and the expert service to the National stakeholders of Costa Rica and Panama will tentatively commence from September 2020.

EXPERTISE FRANCE (EF): Expertise France, a public agency affiliated to AFD (the French Development Agency), contacted the TSU in the month of February 2020, seeking advisory support in the design of a flood early warning system's functional requirements (software and hardware) in the Jordan and Palestine Meteorological Department. This will be the basis for a procurement process that EF will implement later in 2020 in the framework of a DG-ECHO project. The contractual agreement with EF is currently being finalized.

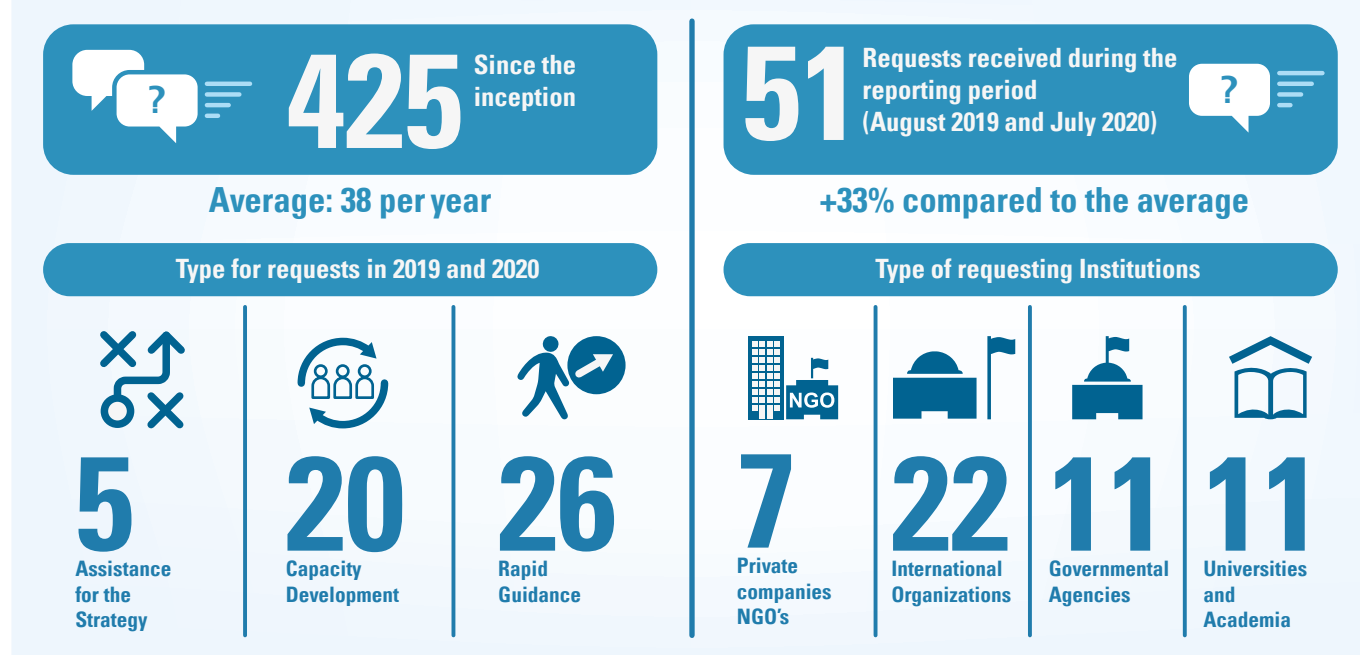
World Bank-Economic Community Of West African States (ECOWAS): The APFM TSU has provided technical review and guidance for the development of a Regional Flood Management Strategy prepared for the 15 ECOWAS Member states, funded by the World Bank. A Technical Meeting to discuss the Strategy was held in Dakar, Senegal in February 2020. A former TSU member attended the meeting (as an APFM Consultant) to better understand the Members' needs and provided feedback and suggestions on the Flood Management strategy report prepared by the West African Science Service Centre on Climate Change and Adapted Land Use (WASCAL). The development of the Flood Management Strategy is under finalization and will be validated through a regional technical meeting planned around October 2020.

Technical Assistance through IFM HelpDesk



The IFM Helpdesk continues to receive requests for support from users working on flood management. In the reporting period, 51 number of requests were received from various users of the IFM HelpDesk. Details about the HelpDesk requests are presented in the table below (check Annex 1 for details on the requests received in the reporting period and refer to previous annual reports for previous requests).

Figure 5- HelpDesk infographic



Some of the Expert Services provided through the IFM HelpDesk include:

GWP – Latin America: The APFM TSU was requested to present the IFM concept and examples of implementation in the context of virtual national training workshops on Integrated Drought Management organized by GWP in three Central American countries (Guatemala, Nicaragua, Honduras). These trainings were carried out in the context of the EUROCLIMA+ project “Increasing capacity for flood and drought disaster risk reduction and promotion of resilience in Central America”, which is led by the Central American Commission of Environment. The presentations and discussions were successful, and increased APFM visibility in the countries, possibly leading to further collaboration with the NMHS of all three countries.

World Bank Flood and Drought Policy Engagement Framework: The World Bank in partnership with Deltares is undertaking a study to develop a “Flood and Drought Policy Engagement Framework”. The general objective of the study is to provide guidelines for World Bank client countries, as well as World Bank teams, to undertake a rapid assessment of how a country or sub-national entity is managing its flood and drought risks and what are the key policies, laws, regulations, coordination mechanisms, and capacity building issues that merit further attention. The study will help developing a general conceptual road map for needs assessment and policy gaps related to climate risks. The World Bank has identified three general categories: i) National Laws and Policies; ii) Planning Processes, such as river basin, flood management, and drought management plans, and iii) around 20 specific Management Areas embedded within these planning processes. In February 2020, World Bank contacted APFM and IDMP TSU to be part of the “external advisory group” providing guidance on the study. Based on the expertise required, University of Dundee from the SBPs was contacted to assess their interest in joining the ‘external advisory group’ (later agreed to be part of this group). Due to covid-19 pandemic, the first workshop in Deltares offices planned on 18th and 19th March 2020 was postponed.

New Project Proposal Preparation

CBFM in Lao’s and Cambodia under CREWS component

WMO Member Services department (formerly known as Department of Regional Affairs, DRA) in joint consultation with other technical division presented the pipeline brief of the Cambodia and Lao’s PDR project to the CREWS Steering committee on 12th June 2020. The project aims to strengthen hydro-met and early warning services, as well as preparedness, early action and response including building institutional capacities of National Meteorological and Hydrological Services and the Disaster Risk Management entities of Cambodia and Lao PDR in generating, communicating, and responding to impact-based warnings. The APFM TSU presented previous work on Community-based Flood Management (CBFM) project in Lao’s between 2013-2016 and planned phase-II intervention (for which identification of donors has been on-going for the past couple of years) to the lead proposal development unit. Based on the information provided, APFM activities on Pilot testing of existing Impact Based Forecasting Warning Systems (if possible, by focusing on cross-boundary pilot areas) using CBFM practices adopted previously including assessments of risk communication, local and indigenous knowledge integration and last-mile connectivity of Multi-Hazard Early Warning Systems in the region to support national/local EWS strategies’ enhancement were included. Also, gender mainstreaming activities are proposed in the pipeline brief. The pipeline brief is approved by the CREWS Steering Committee and the proposal will be finalized around October 2020. The APFM TSU will provide the necessary information in the development of the final proposal. During that phase, SBPs from the region will be contacted to provide necessary support in finalizing the proposals as well as in implementation.

Mekong River Basin

The TSU has been approached by colleagues from other WMO departments to explore the possibility of developing a project proposal in the Mekong river basin commission. The TSU will follow up and in case of new developments, the GWP regional offices and SBPs will be informed for their support in the planning and preparation phase.

APFM linkages with other WMO and GWP initiatives

WMO Flood Forecasting Initiative (FFI)

The FFI was established by Resolution 15 (Cg-XVI) with the objective to “Improve the capacity of meteorological and hydrological services to jointly deliver timely and more accurate products and services required in flood forecasting and warning and in collaborating with disaster managers, active in flood emergency preparedness and response”. The APFM will continue operating under the umbrella of the FFI, disseminating the major outcomes of the FFI workplan such as the Guidelines for the Assessment of needs and capabilities of NHSs or the inventory of interoperable models and platforms for flood forecasting. It will also host the End-to-End Early Warning Systems for Flood Forecasting Community of Practice.

The TSU is also coordinating regularly with other initiatives under the umbrella of the FFI such as: the Flash Flood Guidance System (FFGS), Coastal Inundation Forecasting Initiative (CIFI), Severe Weather Forecasting Programme (SWFP), Multi-Hazard Early Warning System (MHEWS), to identify linkages and synergies with their activities at National, regional and local levels.

Linkages with other WMO and GWP projects

- **Establishing synergies and complementarities in Burkina Faso and Togo under Climate Risk and Early Warning System (CREWS) initiative:** The APFM TSU is continuously contributing to the implementation of CREWS projects, with particular focus on those implemented in the Volta Basin (CREWS Burkina Faso, CREWS Togo, CREWS West Africa). A synergy has been identified especially concerning the country assessments, planned both in the framework of CREWS and of the VFDM. Exchange of information and methodologies with the relevant CREWS project managers has proved to be beneficial to avoid duplication of efforts and mutually complement the assessments.
- **Lake Chad EWS/HYCOS:** The WMO, GWP regional partnership and the Lake Chad Basin Commission (LCBC) with support from the APFM and IDMP TSUs developed a pre-concept note for the Lake Chad basin project, which was endorsed at the sidelines of the UN General Assembly in fall 2018 in New York as one of Africa Adaptation Initiative (AAI) “Flagship” projects ([link here](#)). This project will include elements related to the strengthening of the hydrometric network and reinforcement of early warning systems. The pre-concept was submitted to the Adaptation Fund in the first week of July 2020. Once approved by the Adaptation Fund Board during October 2020, the concept note will be developed and most probably submitted in January 2021.
- **Support to the High-Level Experts and Leaders Panel on Water and Disasters (HELP):** In 2018 and 2019, GWP supported the HELP ground-truthing the Draft Principles on Investment and Financing for Water-related Disaster Risk Reduction through a series of regional consultation workshops. In 2020, in the context of the Covid-19 Pandemic, the HELP developed the Draft Principles to Address Water-related Disaster Risk Reduction under the Covid-19 Pandemic. Building on the support delivered in previous years, GWP provided inputs to these new Principles. Additionally, a Pan-Asia consultation meeting was organised on 30 July 2020 with more than 100 participants. The purpose of the meeting was to gather insights on how to practically implement the Principles. The meeting also



offered a platform for exchange among decision-makers, experts and practitioners in Asia on how to enhance preparation for co-occurring water and health disasters.

Resource Mobilization and Outreach

Participation to the ANYWHERE Annual workshop

The APFM TSU attended the 4th and Final Workshop of the [EnhANCing emergency management and response to extreme WeatHER and climate Events \(ANYWHERE\)](#) in Brussels on 29 and 30 of October 2019. The TSU already attended the first three workshops of the project between 2016 and 2018 in its capacity as [Member of the Stakeholders Board of the ANYWHERE](#) project. The APFM TSU participation in the progress workshops provided opportunity to review the products and tools developed and delivered through the project as well as build contacts with professionals of various organizations working in the area of civil protection, hydrological and meteorological services.

MyDewetra webinars

The APFM TSU together with the CIMA Research Foundation (SBP) and Department of Italian Civil Protection (DCP) organized a myDewetra platform webinar for the WMO colleagues working in various department and regional offices. The webinar which was attended by more than 30 participants aimed at developing knowledge on the free and open source myDewetra platform and identify possibilities to configure it in the WMO Member countries through various WMO projects and initiatives. The link to the recorded webinar video and myDewetra presentation is available [here](#).

Later in July 2020, The APFM TSU together with the WYN and CIMA organized a similar [MyDewetra webinar](#) for the WYN Members and other young researchers or practitioners working in the field of Disaster risk reduction and flood management.

ICFM-8 Workshop

The APFM TSU took the lead and organized a special session on the WMO Long term Ambition “No one is surprised by a flood” to be held at the 8th International Conference on Flood Management (ICFM-8) in Iowa City. Six speakers were identified, and abstracts submitted for this session, focusing on the WMO main activities related to flood management. Due to the pandemic, ICFM8 (initially planned to take place in August 2020) has been postponed to August 2021. It is foreseen to held back-to-back to the ICFM8 the 2021 Support Base Partners Forum, taking advantage of the potential presence of many SBPs at the event. This will have to be considered with the event approaching, and SBPs will be informed in due time.

Kick off workshop on the working group on cost/benefit analysis of early warning systems for flood forecasting

The TSU has been contacted by UNU-INWEH for a possible cooperation on the topic of cost/benefit analysis of early warning systems for flood forecasting. This activity would build on the report “Flood Early Warning Systems: A Review Of Benefits, Challenges And Prospects” (available [here](#)) published by UNU-INWEH, and it is planned to set up a working group to further explore the topic. SBPs are invited to express their interest. Originally the kick-off was planned to take place back-to-back to the ICFM8 in August 2020, but with the ICFM8 being moved to August 2021 further discussion is needed to identify a new suitable date.

Restructuring of APFM Website

During the last few months, development has been carried out for the restructuring of the APFM website to improve its usability and harmonize the user experience with the website of APFM's sister programme, the Integrated Drought Management Programme. The [new APFM webpage](#)

information is currently being updated with new information and is also incorporating additional features such as the Community of Practice (CoP) on IFM along with linkages to other initiatives of WMO (IDMP, MCH Database, HydroHub, FFI initiatives). Furthermore, a [dedicated webpage for the VFDM project](#) is currently under development.

Catalogue of Services (CoS)

Under the new APFM website, the Catalogue of Services page is available through which SBPs activities could be highlighted to the Users. The need for CoS is therefore oriented towards two main directions: 1) From one side, it is aiming to present relevant information to the Users requiring rapid guidance as well as to the APFM TSU, who would be able to have updated knowledge on the expertise available with the respective SBPs. 2) From the other, it will be made available to relevant donors or financial institutions reflecting the expertise which the APFM programme has in terms of providing technical advisory and implementation support.

The APFM TSU together with WYN volunteers will be requesting SBPs continuously to share the latest information on their activities on-going or planned through a [Google sheet](#) or SBPs could also, send information directly to floodmanagement@wmo.int.

APFM SBPs forum LinkedIn group page, WhatsApp group

The APFM has different communication mechanisms, e.g. through a LinkedIn group page or WhatsApp group, to support regular interaction with the SBPs. Both WhatsApp and LinkedIn group page are closed groups only available to the SBPs and TSU for sharing information related to the new call for proposals, conferences or workshops on flood management etc. Another mechanism could be proposed from the SBPs in order to ensure regular participation and engagement of the SBPs.

Figure 6-The APFM website

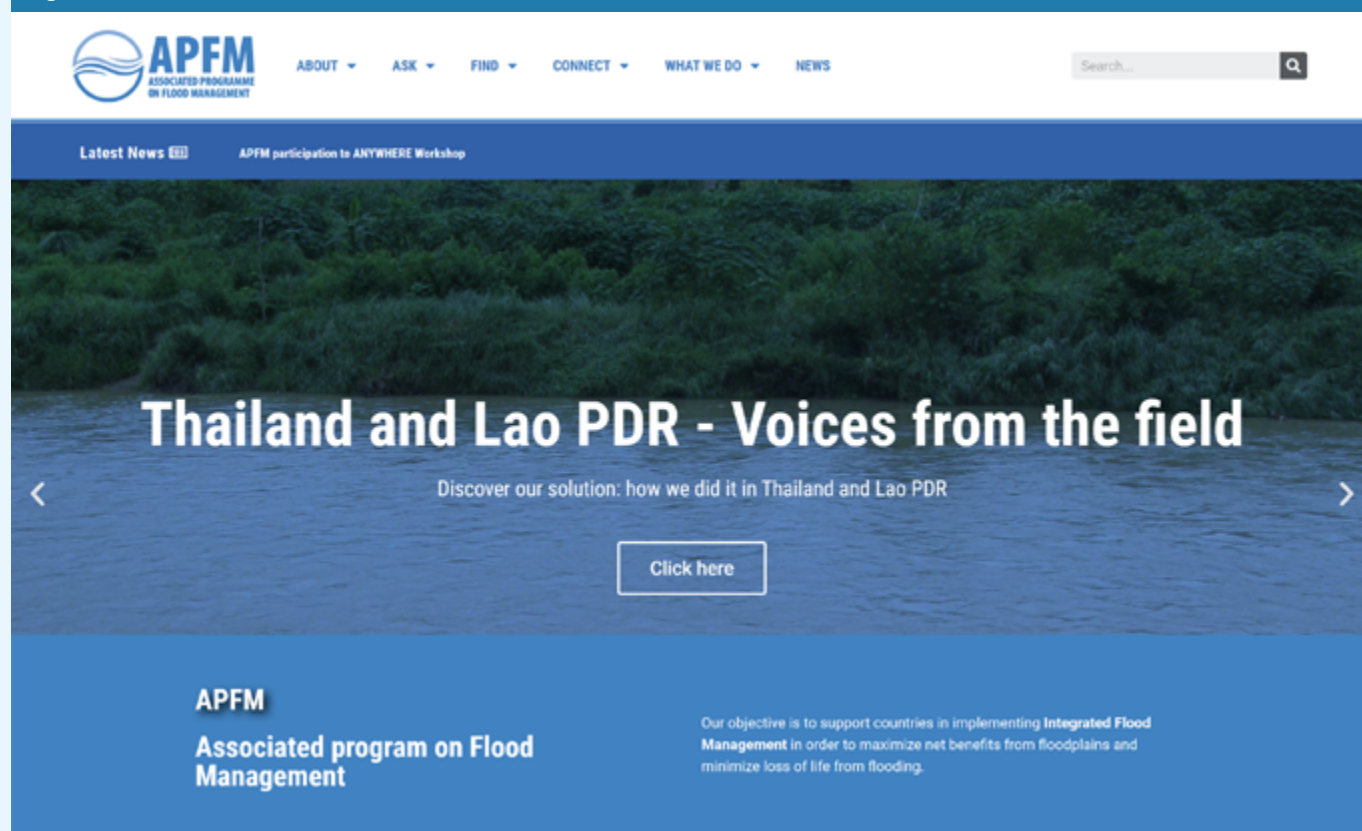
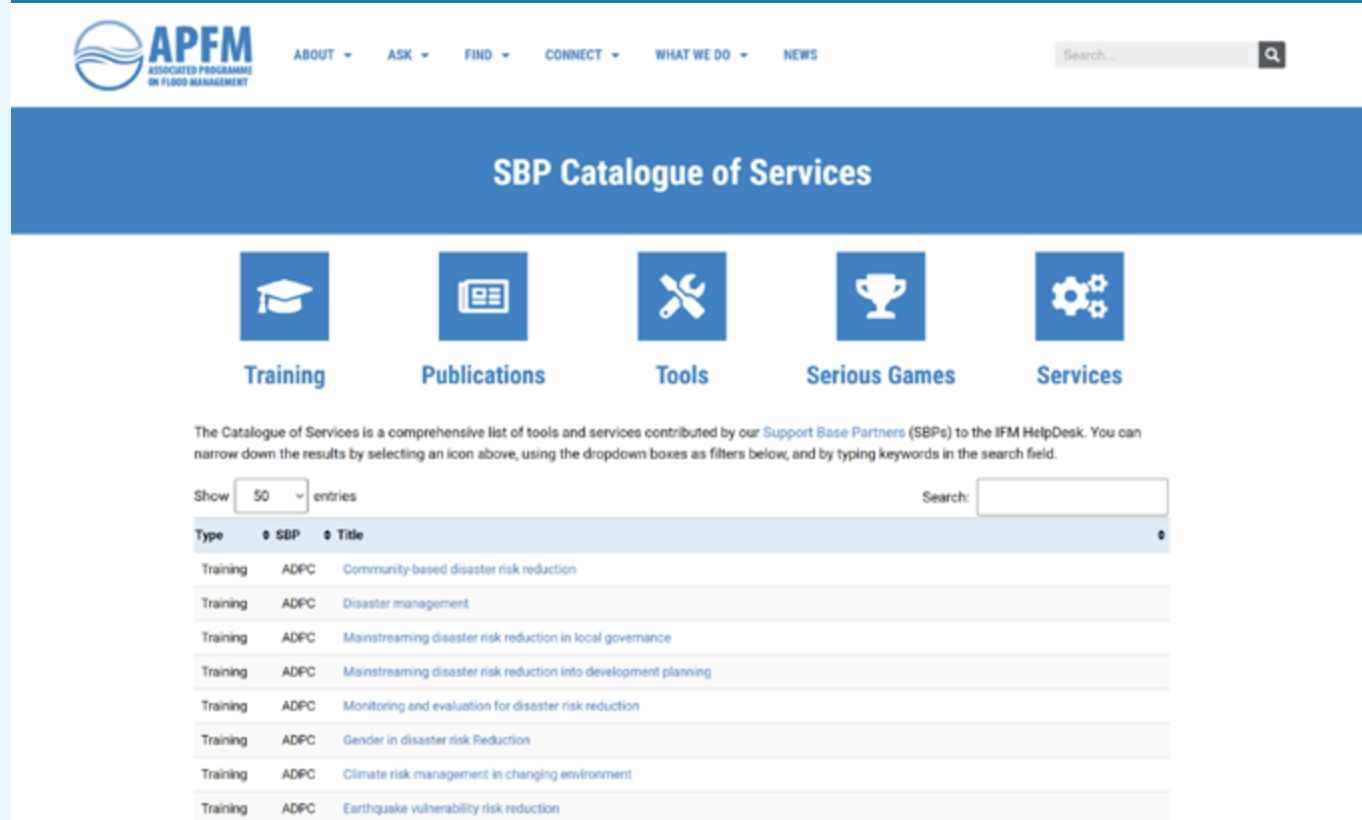


Figure 7-The SBP catalogue of services



Community of Practice on E2E-EWS for Floods Forecasting

Based on the two meetings with the WMO-AWG Members in 2018 and 2019 respectively, implementation strategy for the End-to-End Early Warning Systems (E2E EWS) for flood forecasting using the Community of Practice approach was included in the work plan of the WMO Hydrological Applications, Products and Services. This CoP will support countries to exchange experiences towards the development and adoption of the best available, sustainable and tailored E2E EWS for FF, in line with the philosophy of IFM and open source technologies. Currently, the design of the CoP is carried out by the APFM TSU together with the assigned focal point of SC-HYD and later, the CoP will be developed under the APFM website. It is expected that the first version of CoP will be online before the end of December 2020.

Figure 8-Community practice



The way forward

The APFM TSU will continue the implementation of activities planned under the VFDM project (through Project Manager based in WMO, Executing partners GWP-WA and VBA and some of the SBPs) between August 2020 to June 2021 and beyond.

New Letters of Engagement will be signed between WMO, GWP and existing and new SBPs. The LoE template will be shared and areas of cooperation will be discussed bi-laterally.

The TSU will actively identify new opportunities focussing on E2E-EWS-FF (Integrated Flood and Drought management in general) to develop new project proposals through WMO initiatives, GWP (RWPs and CWPs), and the SBPs.

The APFM TSU, with the active involvement of SBPs, will continue the provision of Expert Services to other WMO and GWP initiatives such as CREWS, World Bank Hydromet technical support, Green Climate Fund, African Development bank etc. Also, APFM will continue to identify potential donors or financial institutions to support the core activities of the APFM mainly the IFM HelpDesk management, Communication and Outreach, Coordination with the SBPs.

The APFM TSU will continue hosting virtual SBPs forum every four or six months to ensure SBPs are informed and actively involved in the WMO and GWP activities.





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Annex-1 List of IFM HelpDesk Requests between August 2019-July 2020

As per the recommendations of the Advisory and Management Committees of 2015, the lists of HelpDesk requests have been aggregated into a single list, independent of the channel through which the request has been received. Criteria on the consistency of aggregated data are provided at the beginning of Annex I in the APFM Annual Report 2015-2016 (APFM Report No. 39).

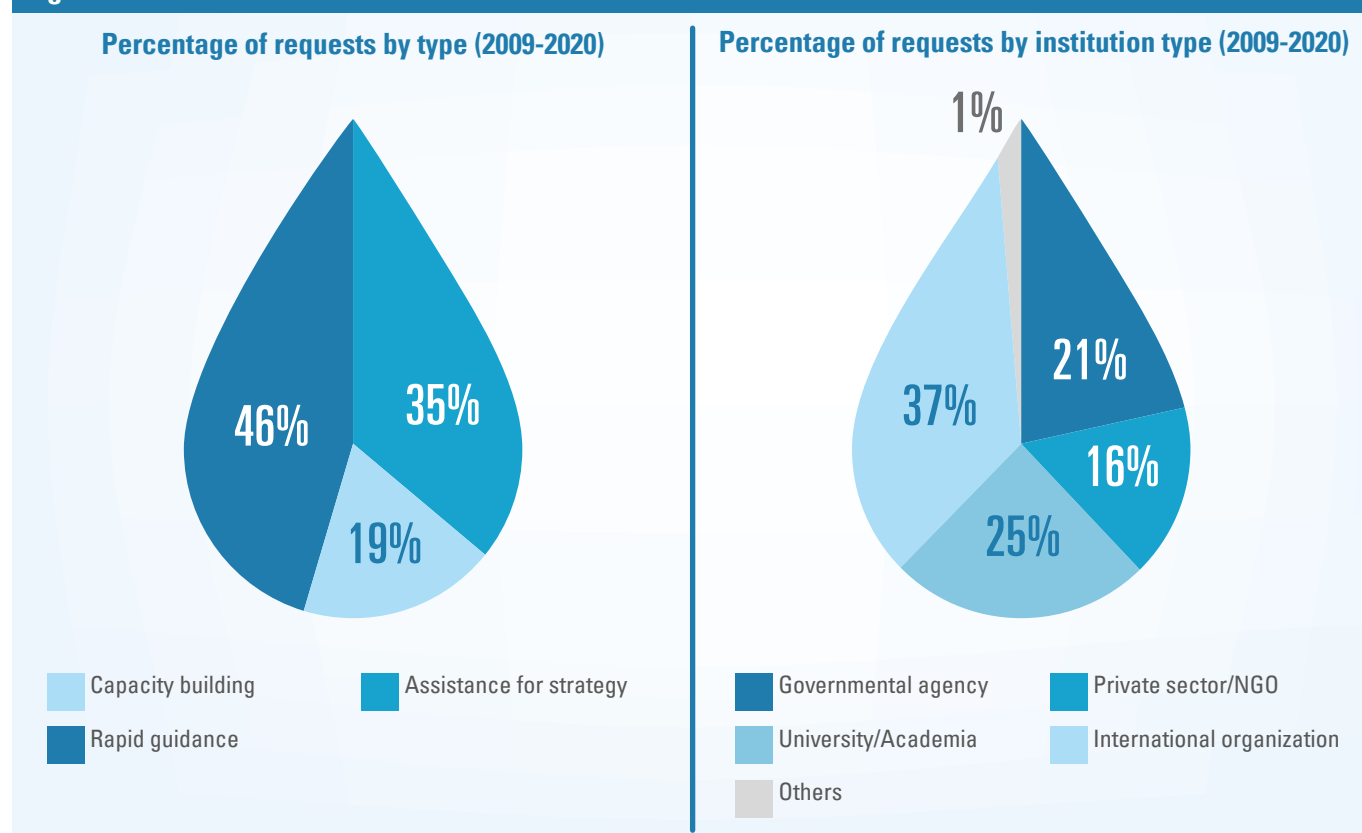
Since 2009, and as of July 2020, 425 requests have been received with an average of 38 per year. Of these 425, 32 were not fully addressed due to inappropriate requests (e.g. request for conference sponsorship, withdrawal, spam or lack of follow-up) from the requesting party. This translates into a rate of fulfilment of HelpDesk requests of more than 92%.

As shown in Figure 1 the most abundant type of request has been the “rapid guidance” (193 requests - 45.41%), followed by capacity building (150 requests - 35.29%). The category “assistance for strategy” covers almost one- fifth of the total requests 19.29% (82 requests) from 2009 to July 2020.

Regarding the requesting institutions, “International Organizations” (157 requests - 36.94%) is the category that made the most use of the HelpDesk, as shown in Figure 2. The remaining requests were from governmental agencies (21.41%), universities or academic institutions (24.71%), NGOs or private consulting companies (16.24%) and from others¹ (0.71%).

Likewise, the proportion remains relatively stable during the last three years with the highest number of requests, i.e. 2018-2019 (55 total requests), 2019-2020 (51 total requests), and 2016-2017 (51 total requests) as shown in Figures 2 and 3.

Figure 1



¹ Others category include technical assistance provided to the group of expertise (for e.g. HELP check in the Annex 1- HelpDesk request 2018-2019 of the Annual Report 2018-2019 for more information) working on specific activities related Integrated Flood Management.

Figure 2 - No. of requests among the three category types and reporting period (2009-2020)

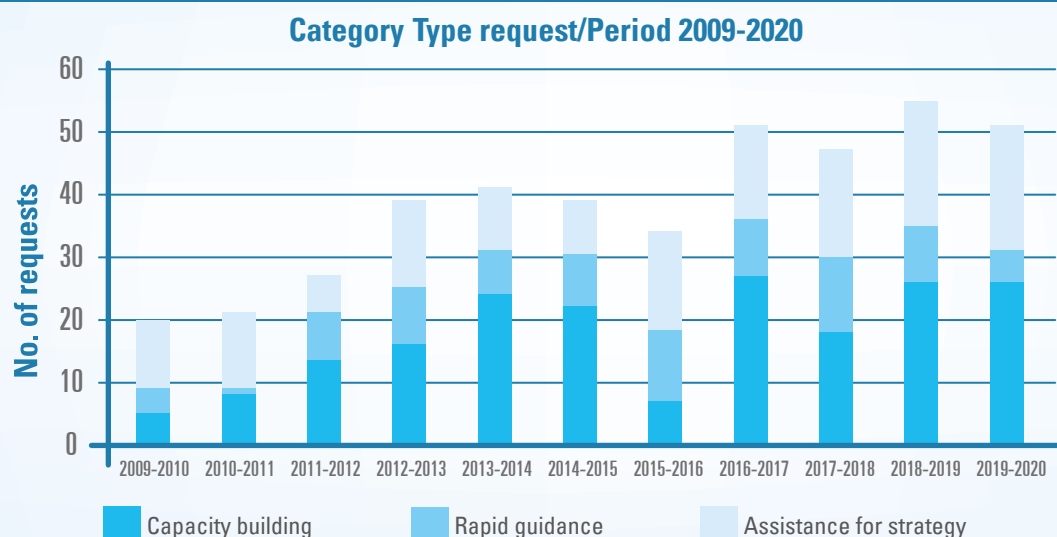


Figure 3 - No. of requests by Institution requesting and reporting period (2009-2020)

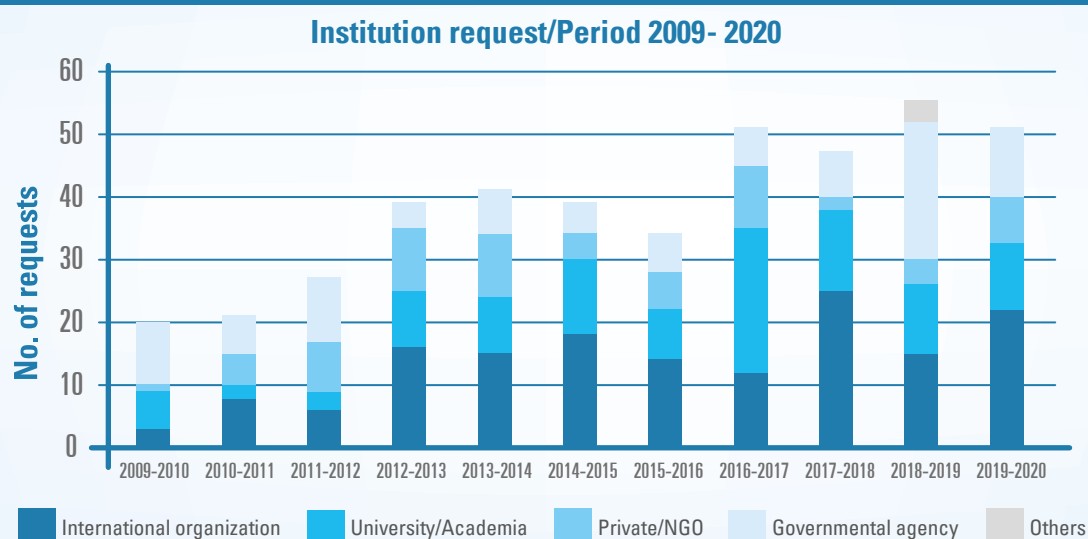
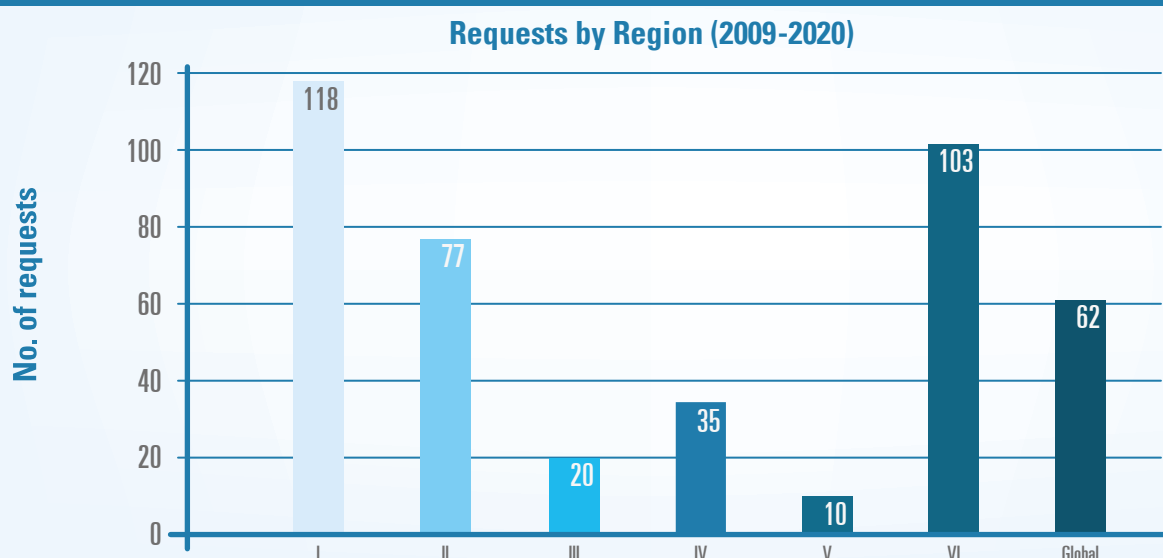
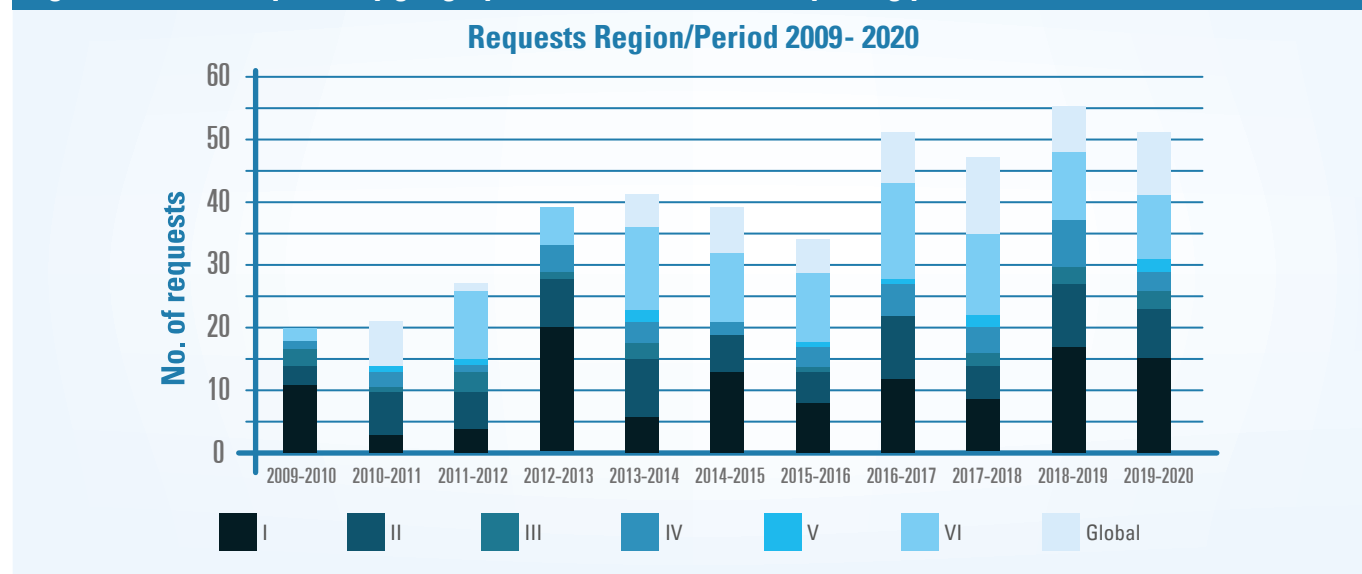


Figure 4 - No. of requests by geographical distribution since 2009



In terms of countries targeted as a result of HelpDesk requests, Figure 4 shows RA I – Africa as the region that has mostly benefitted from APFM interventions (118 requests since HelpDesk inception), followed by RA VI - Europe (103 requests), RA II – Asia (77 requests), RA IV (35), RA III (20) and RA V (10). In addition, 62 requests fall under the new category “Global”, which might reflect activities impacting the global, regional or transboundary level. A distribution by year is also provided in Figure 5.

Figure 5 - No. of requests by geographical distribution and reporting period



During the reporting period (August 2019-July 2020) 51 requests were received: of these, 4 requests were discarded/rejected or lack of follow-up, 9 are either ongoing or action is planned for the next reporting period.

A brief summary of the 51 HelpDesk requests received in the reporting period is provided in the table below. The majority of the 51 requests have been addressed. Prior to this reporting period, 374 requests were made and documented in previous annual reports.

List of IFM HelpDesk Requests between August 2019-March 2020

Requests received by TSU in the framework of the HelpDesk						
Requests (No 1-374) not displayed)		Received from 06/2009 to 07/2020 (see previous annual reports)			Status: 345 Completed 22 discarded 7 ongoing	
No.	Date	Institution, Country	Category (Request came through contacts in WMO or in GWP)	Impact (Region or Global)	Type of request	Status
375	Aug-19	Student, Italy (Universities and Academia)	Capacity Development (WMO)	VI	Request for Consultancy in Operational Hydrology/IFM	Completed
376	Aug-19	Private Company	Rapid Guidance (WMO)	IV	Request for adding document on the APFM website	Rejected Out of scope
377	Sep-19	IRH Ingénieur Conseil	Rapid Guidance (WMO)	I	Request for past precipitation data and information of Tombouctou, Mali	Completed
378	Sep-19	BSH, WMO (International Organizations)	Rapid Guidance (WMO)	I	Request for APFM information	Completed
379	Sep-19	GWP-WA (International Organizations)	Capacity Development (WMO-GWP)	I	Request to present VFDM project at GWP-WA regional dialogue and strategy development 2020-2023	Completed
380	Oct-19	CIMA Research foundation (Universities and Academia)	Capacity Development (WMO)	I	Request to present VFDM project at ESTEC	Completed
381	Oct-19	CREALP (Universities and Academia)	Rapid Guidance (WMO)	VI	Request for contacts on the High Mountain Summit	Completed
382	Oct-19	Ministry of Environment – Colombia (Government Agency)	Capacity Development (WMO)	III	Request to participate in a workshop on flash floods	Not completed – insufficient time
383	Oct-19	PGPRS- Bosnia (Government Agency)	Capacity Development (WMO)	VI	Request for DEWETRA	On-going



384	Nov-19	THW – Germany (Government Agency)	Capacity Development (WMO)	VI	Request to participate in a workshop on flash floods	Not completed – insufficient time
385	Nov-19	UN Environment (International Organizations)	Capacity Development (WMO)	I	Request for VFDM project information	Completed
387	Dec-19	TESO Private Company, Uganda	Capacity Development (WMO-GWP)	I	Request for pilot project on IFM	Ongoing
388	Dec-19	River without Boundary (International Organizations)	Assistance for Strategy (WMO)	Global	Request for providing inputs on guidance document	Ongoing
389	Dec-19	Ministry of Environment Jordan (Government Agency)	Assistance for Strategy (WMO)	VI	Request for providing inputs to a project proposal	Completed
390	Dec-19	Private consultant – Sri Lanka (Government Agency)	Rapid Guidance (WMO)	II	Request for guidance on IFM	Completed
391	Dec-19	GWP Central Africa & Lake Chad Basin Commission (International Organizations)	Assistance for Strategy (GWP-WMO)	I	Review of pre-concept note of project “Integrating water resources management and early warning system for resilience to climate change effects in the Lake Chad Basin” (Countries involved: Chad, Cameroon, Central African Republic, Niger, Nigeria) to be submitted to the Adaptation Fund	Completed
392	Jan-20	Cranfield University (Universities and Academia)	Rapid Guidance (WMO)	VI	Request for circulating a Survey	Rejected Out of scope
393	Jan-20	Student, Münster, Germany (Universities and Academia)	Capacity Development (WMO)	VI	Request for Internship	Completed
394	Jan-20	Expertise France (Government Agency)	Assistance for Strategy (WMO)	VI	Advisory services for a project in Jordan and Palestine	Ongoing

395	Jan-20	PhD student – University of Costa Rica (Universities and Academia)	Rapid Guidance (WMO)	IV	Seeking information on CBFM	Completed
396	Feb-20	World Bank (International Organization)	Assistance for Strategy (GWP-WMO)	Global	Supervision on drafting a Flood and Drought Policy Engagement Framework	Ongoing
397	Feb-20	WFP (International Organization)	Rapid Guidance (WMO)	II	Seeking contacts in Afghanistan	Completed
398	Feb-20	WFP (International Organization)	Rapid Guidance (WMO)	I	Seeking info on rainfall stations in Africa	Completed
399	Feb-20	Government of Nepal (Government Agencies)	Assistance for Strategy (GWP)	II	Project development on 'Integrated Trijuga River Basin Development Plan for Water-related Disaster Risk Reduction'	Ongoing
400	Mar-20	World Bank (International Organization)	Rapid Guidance (WMO)	Global	Seeking information on cost/benefit analysis of flood forecasting	Completed
401	Mar-20	Water Development Agency, Lesotho (Government Agencies)	Capacity Development (WMO)	I	Seeking information on pilot project and financial support	Completed
402	Mar-20	Student from Nigeria (University and Academia)	Rapid Guidance (WMO)	I	Looking for information on internship opportunities	Completed
403	Mar-20	Public Health expert (International Organization)	Rapid Guidance (WMO)	Global	Looking for information on air quality	Completed
404	Apr-20	UNDRR (International Organization)	Capacity Development (WMO)	Global	Request to review definitions related to floods	Completed
405	Apr-20	WMO (International Organization)	Rapid Guidance (WMO)	I	Review of the pre-concept note on EWS project in the Lake Chad Basin	Completed
406	Apr-20	WMO (International Organization)	Rapid Guidance (WMO)	Global	Request for input to the report of the UN SG on the Implementation of the Sendai Framework	Completed



407	Apr-20	WMO (International Organization)	Rapid Guidance (WMO)	Global	Request for input to the methodology for enhancing the climate science basis for GCF activities	Completed
408	Apr-20	CREWS Secretariat, Switzerland (International Organization)	Capacity Development (WMO)	II	Development of CBFM project proposal for CREWS Cambodia and Lao PDR	Ongoing
409	Apr-20	Tonga Ministry of Water (Government Agency)	Rapid Guidance (WMO)	V	Review of the draft national strategy on water management	Completed
410	Apr-20	IDB (International Organization)	Capacity Development (WMO)	III	Request for a session at the Brazil Water Week 2020	Ongoing
411	May-20	IRHA (International Organization)	Rapid Guidance (WMO)	I	Request for hydrological data in Senegal	Completed
412	May-20	US Bureau of Reclamation (Government Agency)	Rapid Guidance (WMO)	IV	Looking for bibliographic reference	Completed
413	May-20	Student, Italy (Universities and Academia)	Capacity Development (WMO)	VI	Request for internship or consultancy	Completed
414	Jun-20	Student, Kashmir University (Universities and Academia)	Rapid Guidance (WMO)	II	Seeking approval for referencing APFM publications	Completed
415	Jun-20	WMO (International Organization)	Rapid Guidance (WMO)	II	Request for input to the impact base forecasting project in South East Asia	Completed
416	Jun-20	GWPO, Stockholm (International Organization)	Capacity Development (WMO)	III	Request to present IFM concept in workshops in Honduras, Nicaragua and Guatemala	Completed
417	Jun-20	DHI, Denmark (Private Companies)	Capacity Development (WMO)	Global	user group- global flood monitoring system	Ongoing
418	Jun-20	Tonga Ministry of Water (Government Agency)	Rapid Guidance (WMO)	V	Finalization of the draft national strategy on water management	Completed

419	Jun-20	ARCAD, Uganda (NGOs)	Capacity Development (WMO)	I	Seeking information on pilot project and financial support	Completed
420	Jul-20	Geneva Water Hub, Switzerland (International Organization)	Capacity Development (WMO)	I	Request to present VFDM project	Completed
421	Jul-20	TAMSAT, UK (Government Agencies)	Capacity Development (WMO)	I	Request to present VFDM project to the Central and West African National services	Completed
422	Jul-20	JRC (International Organization)	Rapid Guidance (WMO)	Global	Looking for Bibliographic reference	Completed
423	Jul-20	University of Agriculture, Faisalabad	Rapid Guidance (WMO)	II	Looking for Bibliographic reference	Completed
424	Jul-20	UNECE	Rapid Guidance (WMO)	I	Seeking contacts at VBA	Completed
425	Jul-20	Baker Hughes business (private companies)	Rapid Guidance (WMO)	Global	request for contacts on pressure probes	Completed (linked with HydroHub and HMEI)





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