

APFM Flood Management News

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PILOT PROJECTS

Midterm review of Pilot Project in Thailand and Lao PDR

In February, the Asian Disaster Preparedness Center (ADPC) submitted its mid-term progress report on the pilot project "Empowering Communities - Community-based Approaches to Flood Management in Thailand and Lao PDR", covering the first implementation phase up till December 2014. According to the report, activities are carried on in parallel in Thailand and Lao PDR, even though the latter has a slight delay compared to the first, due to the late approval of the project proposal. In both target communities, Participatory flood Risk Assessments (PRA) were conducted through the Hazard, Vulnerability and Capacity Assessment (HVCA) 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 Thailand, they were held from 16 to 17 December 2013, and in Lao, a five-day training on Community-Based Flood Risk Management took place from 17 to 21 November 2014 encompassing the PRA as field exercise on the provision of flood monitoring and early warning. The same kind of course was organised in Thailand in August 2014 (on 17, 18 and 23 August) with the support of local and national authorities, whose representatives also participated to the training and simulation exercise.

The following step in the implementation timeline was the establishment of Community-Based Flood Management Committees (CBFMCs) and the development of community flood management plans and hazard maps. In the Thai communities, CBFMCs were formed in February and March 2014, identifying clear roles and responsibilities before, during and after floods for each member. They prepared a draft plan and charts, which were shared with community members and local authorities. During the simulation exercise in August 2014, the plan and



maps were tested and revised accordingly. The training was so successful that it was proposed to extend the development of local plans and maps to another nine communities. In Lao PDR, community flood management plans were drafted in January 2015 and are under discussion with ADPC for further improvement. These plans elaborate on names and tasks of CBFMCs members.

Finally, some additional material was provided to one of the Thai communities for demonstration purposes. Twelve CCTVs and four spot lights were installed thanks to the financial support of the project, whereas four CCTVs were set up by the community chairman at his own costs.

Pilot project in Bangladesh: Meeting in Dhaka, April 2015

Parallel to the 6th South Asia Climate Outlook Forum in Dhaka, Bangladesh, a side meeting was held with the Bangladesh Water Partnership, the Bangladesh Water Development Board and its Institute for Water Modelling to follow up on the Integrated Coastal Flood Management Initiative that emanated from the national workshop supported by the APFM in October 2014. Improvements to the pilot project proposal were identified, together with elements of a national fundraising strategy.

CAPACITY BUILDING

Flood Management Training Course at SDC, 30 March-2 April 2015, Bern, Switzerland

The APFM was invited to facilitate a session on Integrated Flood Management in the framework of a training course on flood management organized by the Swiss Agency for Development and Cooperation (SDC). The target audience of this training were members of the SDC Disaster Risk Reduction network, as well as University of Bern, Swiss and Austrian



Red Cross, Terre des Hommes, UNDP, OSCE, UNEP/GRID, Helvetas Swiss Intercooperation and other NGOs. The course included field visits to Thun, Switzerland, to evaluate measures taken for lake regulation and debris flow management in the Bern Canton, and to the Matte neighbourhood of Bern. This allowed participants to assess flood proofing solutions in a urban environment.

Lecture at the CERG-C/University of Geneva, 29 April 2015, Geneva, Switzerland

On 29 April the APFM participated in the event "An exchange with Organizations dealing with disasters" organized by the CERG-C training program of the University of Geneva. CERG-C is a specialization certificate for the assessment and management of geological and climate related risk for professionals with a background in earth sciences or civil engineering. The exchange was intended to gather different organizations that focus on multiple aspects of disaster risk reduction to present their work to the CERG-C programme participants, a group of around 20 scientists from all around the world. While the APFM introduced the concept and principles of IFM, other organisations, such as UNISDR, UNECE, UNOSAT and the Swiss Agency for Development and Cooperation (SDC), illustrated further issues related to DRR. The event provided a good opportunity to share different opportunities and challenges on measures taken to manage risk in the different regions represented in the programme.



PEARL - Preparing for Extreme And Rare events in coastal regions

4th PEARL Project Committee Meeting, 17-19 June, Genoa, Italy

From the 17th to the 19th of June, the 4th Project Committee Meeting of all partners to the PEARL project met in Genoa, Italy, location of one of the case studies. The agenda included presentations about progress made in the case studies and Work Packages (WPs), as well as allowing the work groups to discuss their issues and challenges. A very interesting session was dedicated to demonstrating prototypes of the tools produced within the project, followed by illustrations of the investigations conducted by PEARL's Young Researchers.



Under the burning Mediterranean sun, participants also visited the areas affected by flood events in the municipality of Genoa, guided by a local expert, Prof. Giorgio Roth from the University of Genoa. The APFM would like to thank the Geographical Information System International Group (GISIG) for organising the meeting, which was a stimulating and fruitful occasion for exchanging views among partners and afforded an opportunity to review plans covering the next six months.



PEARL project outreach



In February, the Integrated Research on Disaster Risk (IRDR) programme issued a new publication entitled "The FORIN Project – Understanding the Causes of Disasters". It describes the Forensic Investigations of Disasters (FORIN) methodology applied in the development of the PEARL Risk and Root Cause Assessment (RRCA) approach in WP1. Through the description of three case studies from Taiwan, Haiti and U.S.A., it outlines

various models of root causes and risk drivers, deriving some conclusions for policy-making.

Not only the IRDR programme, but all partners are committed to the dissemination of PEARL's outcomes. In the last months, the project was promoted at various international events:

- Workshop of LIFE+IMAGINE project on the "Use of Interoperable Data and Services for Coastal Management", 30 January, Genoa, Italy. Alessandra Marchese from GISIG gave a presentation on PEARL and the Genoa case study. A poster illustrating the objectives, structure and research within the project was also displayed
- Workshop on "Research that Generates Innovation for a Sustainable Future", organised by TICASS, a Consortium promoted by Regione Liguria, on 20 February, Genoa, Italy. The project and the Genoa case study were introduced by Alessandra Marchese from GISIG. A poster supported by an abstract outlining PEARL's objectives and outcomes complemented the presentation.

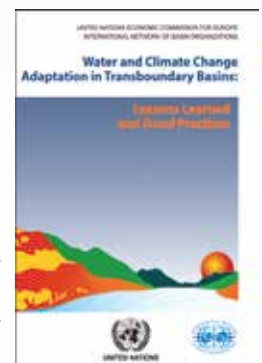
- European Geosciences Union (EGU) General Assembly 2015, 12-17 April, Vienna, Austria. Dr Alberto Elizalde from the Max Planck Institute for Meteorology presented a poster on "Characterization of Extreme Sea Level at the European Coast" showing the results of investigations in WP2
- Simulation of Urban MObility (SUMO) User Conference 2015, 7-8 May, Berlin-Adlershof, Germany. Ms Katya Pyatkova from the University of Exeter explained the research conducted by her institute in the field of "Flood Impacts on Road Transportation Using Microscopic Traffic Modelling Technique". A paper reflecting the content of her presentation was accepted for post proceedings
- XVII World Meteorological Congress, 25 May-12 June, Geneva, Switzerland. In addition to the distribution of PEARL's flyer at the congress exhibition, a side event took place and was entitled "Reducing Risk and Increasing Resilience in Coastal Areas: PEARL and RISC-KIT Projects". Furthermore, 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.

PUBLICATIONS

Contribution to UNECE publication on climate change adaptation in transboundary basins

The UNECE launched its new publication on "Water and Climate Change Adaptation in Transboundary Basins: Lessons Learned and Good Practices" at the 7th World Water Forum 2015 in Daegu & Gyeongju, Republic of Korea. It is intended as a continuation and integration of its earlier work "Guidance on Water and Adaptation to Climate Change", which was issued in 2009. This effort provides transboundary stakeholders with concrete suggestions on how to effectively adapt to climate change. To achieve this, it collects 63 lessons learned and 58 case studies from all around the world to serve as examples of good or bad practices. These prove insightful when developing water management strategies in rivers, lakes and aquifers shared by more than one country.

As member of the editorial group, the staff of the APFM participated in the drafting and editing of some parts of the text. They also assisted in the coordination of the effort and the review of the publication.



OUTREACH & NETWORKING

Second Transboundary Flood Management Workshop, 19-20 March 2015, Geneva, Switzerland

On 19-20 March UNECE organised the Second Transboundary Flood Management Workshop. It was a follow-up to the first meeting, which was held in 2009 within the framework of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (the so-called "Water Convention"). Thanks to the broad participation of a number of experts in the field of transboundary flood risk management, the event proved to be an effective platform to share issues, successes and lessons learned in the development of strategies in basins flowing through different countries. In addition to presentations of several case studies from Europe, Asia and Africa, a site visit to flood protection measures in the Geneva Canton allowed attendees to see a concrete example of transboundary cooperation between Switzerland and France.

The APFM contributed to the workshop by not only illustrating the concept of Integrated Transboundary Flood Risk Management, but by also moderating the session on Flood Forecasting and in leading discussions in breakout groups.

XV World Water Congress of IWRA, 25-29 May, Edinburgh, UK

During the XV World Water Congress of the International Water Resources Associations (IWRA), the APFM had the opportunity to highlight its current and future activities related to Integrated Flood Management and those of the Hydrology and Water Resources Programme of WMO. For this purpose, a presentation about "Global Developments in Integrated Flood Management" was given during Special Session 4 on International Catchment Management Science and Application, convened by the UK Centre for Ecology and Hydrology. Upon invitation of the Dundee Centre for Water Law, Policy and Science, the APFM also introduced the issue of "IFM and Decision Making" in Special Session 34 on how to incorporate the science evidence base into water policy and law, including catchment, national and transboundary challenges and perspectives. Both presentations were followed by a panel discussion.



APFM-IDMP side event at WMO Cg-17, 2 June, Geneva, Switzerland

Targeting policy- and decision-makers attending the XVII World Meteorological Congress (25 May-12 June, Geneva, Switzerland), the side event on APFM and IDMP (Integrated Drought Management Programme) Helpdesks took place on the 2 June, during the same week as Plenary discussions were being held on water resources and hydrology issues. After a comprehensive introduction on the rationale and history behind the two programmes by Frederik Pischke from GWP, Harry Lins, President of the WMO Commission for Hydrology, and Federica Rossi, Vice-President of the WMO Commission for Agricultural Meteorology, gave an overview of the content, structure and functions of the two web platforms. The side event was very successful in bringing the HelpDesks to the attention of participants, who were suggesting improvements and new possible fields of work.



Article on Latin America Geospatial Portal on case study by UNOSAT

In February, UNOSAT and the APFM published an article entitled "Adapting to climate change: The case of Santos Harbor metropolitan area (Brazil)" on the Latin America Geospatial Portal. It describes through the case study of Santos Harbor, located on the Brazilian seashore, the application of an innovative methodology to investigate the effects of climate change on waves and their impacts on coastal areas. The approach was developed by the universities of Sao Paulo (Brazil) and Turin (Italy) and the Aeronautic Technology Institute of San Jose dos Campos (Brazil). The purpose of the article was to show one of the many possible ways in which geospatial sciences can contribute to the development of adaptation policies. In fact, the main success of the research conducted in Brazil was to provide local decision-makers with medium and long term scenarios. These were used to design a strategic plan which included structural and non-structural measures focusing on the navigation and coastal defences for Sao Paulo State. Being drafted jointly with UNOSAT, the article represents a good example of collaboration between the APFM and its Support Base Partners.



Guest Editor initiative by UNISDR

PreventionWeb, the UNISDR's webplatform for the disaster risk reduction community, hosts a section called "Guest Editorial", where different articles written by professionals analyse specific aspects of DRR and recommend related key reading and events. Meant as "Expertise Services", these editorials aim to support decision-makers in developing informed policies through the provision of expert opinion and updates. The APFM took part in the initiative with a collection about "Social aspects of flood management: from communication of flood risk to Social Impact Assessment and stakeholders' involvement", which was issued on 13 April. While focusing on three particular facets of the more general topic of social issues in flood management (communication of flood risk, Social Impact Assessment and stakeholders' involvement), it suggests relevant articles and publications by the APFM as well as other institutions.

STAFF MOVEMENTS

Departure of Roberto Silva and Ranila Rana

After several months with the APFM, both interns Roberto Silva and Ranila Rana moved to enjoy new experiences. They provided valuable contributions to the programme, especially with regards to the development of the Strategic Plan 2014-2018, the design of the new website, the revision of some Tools, and the implementation of the Communication Strategy. Heartfelt thanks for their dedication, enthusiasm and team spirit and all the best to them for their future endeavours.

Arrival of new staff

Firas Al Janabi

Firas Al Janabi joined WMO in May as Project Officer in the Climate and Water Department. He has been working for many international projects at Dresden University of Technology and as a group leader in the Ministry of Municipalities and Public Work of Iraq. He holds a Ph.D. in Hydrology and Meteorology from the TU Dresden (2014), a M.Sc. in Hydro-science and Engineering from the TU Dresden (2009), a Master Degree in Integrated

Flood Risk Management from the TU Dresden, a B.Sc. in Civil Engineering from the Babylon University in Iraq, and a Diploma in Advanced Business English and International Negotiations from TUDIAS, Germany. Firas will initiate and coordinate the editorial process of different IFM tools, assist in the preparation of a first draft of the publication "Primer for Integrated Flood Management- from Theory to Implementation", and provide support to the management and administration activities of APFM and Flash Flood Guidance System with global coverage (FFGS) project.



Sara Oppenheimer



Sara Oppenheimer joined the APFM TSU on 20 April for a period of 5 months. She holds a MSc in environmental science and engineering with a specialization in chemistry and environmental bioprocesses. Sara studied at the École Polytechnique Fédérale de Lausanne in Switzerland and did her master thesis at the Universidad de Antioquia in Medellin, Colombia. After an internship with APFM during her studies

in 2012, she did two more internships in the field of sanitation in developing countries. The first was with the Swiss Federal Institute of Aquatic Science and Technology (EAWAG) in Zurich and the other with the German Society for International Cooperation (GIZ) in Morocco. In the APFM, she will mainly focus on the development of IFM Tools and provide support to activities for the EU-funded project PEARL and for WMO Hydrology and Water Resources Programme.

Isabel Riboldi

Isabel Riboldi started working on 7 April as Project Officer in the Climate and Water Department of WMO. She will be focusing on outreach activities till the end of 2015. She has a master degree in International Relations from the University of Milan (2012), where she graduated with a thesis about sustainable development in the African continent. Isabel has been supporting the implementation of the APFM's Communication Strategy since 2013, as a consultant. Before this, she had worked with the Italian Permanent Mission to the International Organizations in



Geneva, in the IPALMO research institute in Rome and in various private companies. During the next months she will be responsible for the continued development of the programme outreach activities, including the APFM's and PEARL's websites, social networks, information material and catalogue of services offered through the network of SBPs.

Pranav Dhawan

Pranav Dhawan comes from New Delhi, India and joined the Climate and Water Department of WMO as a graduate intern on the 11 June. After successfully completing his Bachelor of Technology in Mechanical and Automation Engineering in India, he felt the need to work in the water sector as it remains an important issue for his country. He is currently pursuing Erasmus Mundus EuroAqua (MSc in Water Management and Hydroinformatics) where his specialization is urban water management. In WMO he is responsible for the UNECE Working Group meeting on IWRM. He is also actively involved in the preparation of the APFM Advisory and Management Committees meetings, provides assistance in Flash Flood Guidance Systems, as well as providing support in managing the social networks of the APFM.

