

Disaster Mitigation Competence Centre plus (DMCC+) in EOSC- Hub Project: Thailand

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Table Of Contents

- Flood Management System
- Water Resource Management: Good Practice in Different Disaster Cases
- Active Fires Monitoring and Detection Daily System
- Fire Behavior Daily System
- Smoke and Haze Monitoring and Simulation
- Adding Thailand and Myanmar in COMCOT and COMCOT-SURGE
- In Conclusions

Flood Management System: Regarding hydro-informatics or hydro-technology that have been developing by HAll, there is none extraordinary things rather usual technology that can be seen all over the developed countries; therefore, have to think of how to present this part well. May be intended audiences might be a justification for that. The topics would cover the followings:

- National and ASEAN Hydroinformatics Center
- HAll Flood Decision Supporting System
- HAll Thaiwater Application and System
- RS Monitoring System including International Charter and Sentinel Asia

Water Resource Management: Good Practices in different water related Disaster Cases examples can be selected from different kind of problems following UNISDR-HAII disaster risk reduction collaboration (Application of Science and Technology for Community Water-Related Disaster Risk Reduction: Thailand Good Practices following His Majesty the King’s Initiative towards Sustainable Development, Utokapat Foundation Under the Royal Patronage of H.M. The King Bhumibol Adulyadej, 2016 (www.haii.or.th/haii/wp-content/uploads/2016/10/WRDRR-Book-FULLreview.pdf)). The main focus and implementation are delivering through “Community Water Resource Management (CWRM),” building a disaster resilience community.

- Drought
- Flood
- Landslide
- Brackish water
- Forest fire prevention

Active Fires Monitoring and Detection Daily System: this can be demonstrated current free access systems.

Fire Behavior Daily System: this also can do like the above.

Smoke and Haze Monitoring and Simulation: This also can do like the above, **BUT** since there will be a system for open burning of Indonesia from DMCC Phase I, will it be possible to expand its domain to cover Upper ASEAN Region as well?

OR it will be even better to have a separate system with higher resolution for better use to support and assist a fire, smoke and haze control and management which do not have such system using in the region yet. It will definitely give a big impact to have such a system in place which will showcase the great benefit of the project to the real operation.

The system can be used in daily operation of Forest Fire Control Division, Department of National Parks Wildlife and Plants Conservation and it can also be cooperated or collaborated with The Asian Forest Cooperation Organization (AFoCO)- The Regional Education and Training Center (RETC) (<http://retc.afocosec.org/>) which Korean Government just established in Myanmar for its member counties including all ASEAN countries.

Creating above topics like COMET MetED UCAR or NASA ARSET:

By putting all materials online might be a good way to follow, so many people will be able to access and learn materials freely online and be able to reach out to more and unlimited audiences.

MetEd (<https://www.meted.ucar.edu/index.php>) is a free collection of hundreds of training resources intended for the geoscience community. Whether you're an experienced meteorologist honing existing skills or a student looking for new geoscience topics of interest, we have something for you.

NASA Applied Remote Sensing Training (ARSET, <https://arset.gsfc.nasa.gov/>).

But, a good graphic support will be needed!!!

Regarding Tsunami and Storm Surge Early Warning by COMCOT (iCOMCOT) or COMCOT-SURGE, it will be excellent and helpful to add Thailand and Myanmar into the system as well.

In Conclusions

- There are many topics including free good systems to pick from in case of water related disaster.
- There are a few free active fire detection and monitoring systems to be selected.
- There are a few smoke and haze monitoring systems, but those are not sufficient and efficient to support daily smoke/haze control and management. The smoke and haze transboundary issue is also a big problem an issue in Upper ASEAN region.
- Adding Thailand and Myanmar in COMCOT and COMCOT-SURGE system.
- The proper and effective ways to deliver what will be developed and created will need to be discussed and decided.