

CONCLUDING REPORT

Title: “Roadmap Toward Effective Flood Hazard Mapping in the Philippines”

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The Curriculum

In general, all parts of the curriculum were impressive, insightful and relevant. They had improved my professional knowledge on hydrology, hydraulic and river engineering. My technical know-how on the methods to promote public awareness on flood damage mitigation is enhanced. I consider topics on Hydrological Statistics; Flood runoff and inundation analysis; Hydrologic Observation and Precision as very relevant. Most of the topics in these subjects were quite familiar but may have been forgotten. Hence, it was sort of a refresher course for trainees. Lectures on Development of Dynamic Flood Hazard Map; and Effectiveness of Flood Hazard Maps and its Challenges (with the Tsunami Simulator Presentation) were very impressive and insightful. I wish in due time we would be able to come up with such a model to improve its disaster mitigating capabilities.

For Effective Flood Disaster Mitigation in the Philippines

In the Philippines, the occurrence of disasters has become an important factor adversely affecting our economic development and social stability. These disasters, floods and typhoons in particular occur mainly because of our geographical location. Many of these emergency situations cannot be avoided. But the extraordinary nature of these disasters can be mitigated if not prevented through “effective contingency planning”.

Effective contingency planning involves a predictive response element to an impending emergency by ensuring the availability of financial, human and material resources. It is meant to help network and coordinate individuals, agencies and organizations to affect a rapid and effective response. This is where Flood Hazard Mapping comes in. There should be a tool that would guide the residents and flood managers to act decisively. Furthermore, Effective Contingency Planning ensures the availability of stand-by resources and provides mechanism for rapid decision-making that can shorten flood disaster response and ultimately save lives.

Actions To Be Undertaken

- Within one (1) year
 - Produce one prototype Flood Hazard Map for the target areas of Angat Dam Sub-basin.

Angat Dam sub-basin is a part of the Pampanga River Basin. This area is chosen considering the following:

- (1) It was severely hit by a flood event that happened very recently (late November 2004).
- (2) Its proximity to the main Flood Forecasting Office (in Quezon City) as compared to other river basins. Ground-truthing, data gathering and other activities would be easily carried out with minimal expense considering the limited budget of the office.
- (3) Our Flood Forecasting Office has initially established some tie-ups with local administration for the implementation of certain activities (i.e., public information drives, establishment of flood markers, among others.)
- (4) Availability of some data
- (5) The area has been the subject of some project studies and thesis. These initial studies will be important inputs to this undertaking.

- Short Term Project
 - Conduct study on the feasibility of producing a Flood Hazard Map for cities/municipalities within existing telemetered river basins, in coordination with colleague/co-trainee.

Considering the great task, as well as great financial requirement of producing flood hazard maps, a feasibility study must be undertaken to identify which towns/cities are capable and willing to undertake such project. If the local administration will not support the production of this map, the chances to succeed would be nil.

- Mid/Long-term Project
 - Improvement of the present format of the Flood Bulletins/Information which our office is issuing by incorporating some basic points from Flood Hazard Map.

One of the main mandate of our office is the issuance of flood forecasts/warnings/information whenever there is an impending flood. We are covering four (4) major river basins. The format is basically text message which tells something on the present hydrometeorological condition of the river basin, a quantitative information on rainfall and water level, and finally gives a hydrological forecast on what would be the effect of such within the next hours. By incorporating some “basic” aspects drawn up from Flood Hazard Maps (such as inundation patterns, available evacuation shelters and routes, important telephone numbers, etc.), I’m sure there would be a better reception and comprehension by the residents as well as people involved in rescue and relief

operations. Although some might not be feasible for the moment, but steps will definitely be undertaken. Initially, the idea will be brought to proper channels so that a core group will be created to execute the plan.

- Before the next batch of trainees

If the projects/initiatives described above are put into operation, the candidates for the next trainings must be involved in all the activities of such undertakings. This is not only to prepare them for the training but for them to be able to contribute something that has been done and has produced a certain degree of success (if ever).

Advice / Suggestions for Effective Flood Management in Japan

At present, Japan has a very sophisticated method of flood management. But still we could not say it is perfect (because nobody is perfect). Maybe there is a need for review of some of its existing flood hazard maps. Some might have been too complicated that a common person would never be able to understand even so many information dissemination has been conducted. Many things had been identified on the discussion on Town-watching activity. I would say those are very relevant. Provision of signages for flood evacuation routes and location of evacuation centers are quite simple proposals but might prove effective. Such signages should be bilingual and more foreigner-friendly.

Finally, the increasing trend of the number of elderlies should be given due emphasis in the formulation of plans for flood management.

Advice / Suggestions for More Meaningful Training Course

It has to be passed on to next participants to remember that this is a “Focused Training Course”. It is not enough to just listen to lectures. It is also important to present something from their own sides: specifically their country’s condition on flooding and its mitigation. This way, everybody gets benefited. Everybody learns from each other. There is sharing of knowledge. It is also important to interact and ask what is vague and where there is a need for further explanation.

I came across the “Top-model” back in year 2000 but unfortunately I was not able to give emphasis on it. I think this is highly recommended as one of the topics for the next training course for Flood Hazard Mapping.

Finally, the town-watching activity should be provided with a longer time. If the course duration is impossible to extend to consider this, perhaps town-watching activity could be done on site visits to certain cities.