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Council Study

Development Scenarios for Flood Protection & Floodplain Infrastructure

6th RTWG Meeting
Phnom Penh, Cambodia
17-18 December 2015

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BACKGROUND

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During 5th RWTG FMMP committed itself to make additional efforts into communication and coordination with all MCs, particularly with Thailand



ACTIONS

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ACTIONS



1. Dedicated meeting with TNMC on 10 September 2015 in Bangkok with objectives:
 - Present & discuss FP&FPI theme of Council Study
 - Present & discuss scope FMMP Initial Studies
 - Agree on follow-up activities:

2. Regional Technical Meeting on 4 November 2015 in HCMC:
 - Present FMMP Development Scenarios for Council Study and data requirements
 - Received feed-back to improve Work Plan

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COORDINATION WITH OTHER TEAMS



3. Furthermore meetings were arranged with other teams to discuss location of IALs and flood behaviour characteristics:
 - Fisheries (meeting 11 September 2015)
 - Agriculture (meeting 7 October 2015)
 - Navigation (meeting 8 October 2015)

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DATA

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2007 Early Development Scenario

- SWAT, IQQM and ISIS models are available for the 2007 situation for use by IKMP. .
- Limited re-schematization and incorporation of extended river sections with associated flood plains will be required.

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DATA GAPS

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Data collection for flood protection works and floodplain infrastructure

For the year 2020 and 2040

- **Significant** increase of crest levels of embankments/dikes/levees, expansion of the length of embankments/dikes/levees, and construction of new embankments/dikes/levees
- **Significant** expansion of the network of highways and national roads, construction and expansion of ring roads around cities and towns
- **Significant** land-use changes through landfills
- **Significant** sized new irrigation structures (with incorporation of flood protection)
- **Significant** expansion of urbanization in floodplains

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DATA GAPS SUMMARY



Dataset	Cambodia	Lao PDR	Thailand	Vietnam
Flood protection works and flood plain infrastructure for 2020 and 2040	Not available yet	Not available yet	Not available yet	Not available yet
Flood damage data 1998 - 2007	Available for IS districts Not yet available for remaining CS districts/provinces	Available for IS districts Not yet available for remaining CS districts/provinces	Not yet available for IS districts and remaining CS districts/provinces	Available for IS districts Not yet available for remaining CS districts/provinces
Flood damage data 2008 - 2014	Not yet available	Not yet available	Not yet available	Not yet available

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MODEL GAP

Flood behaviour assessment in the corridor upstream of Kratie



Thailand requested attention for the fact that the hydrodynamic model for the Mekong upstream of Kratie is not suitable yet for flood impact assessment. Downstream of Kratie an ISIS model is available in addition to the SWAT/IQQM models.

But for the upstream part only SWAT/IQQM is available which allows changes in flood behaviour in terms of simulated flow only.

Thailand requested to investigate an alternative for updating the ISIS models upstream of Kratie so that they can be used for flood impact assessment.

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Data collection of flood damage data



FMMP has requested flood damage data; Member Countries have agreed providing available flood damage data from district level in the period 1998-2014.

This has been accomplished through Memorandums of Understanding, Contract and Terms of Reference as part of the data and information requirements for the FMMP Initial Studies.

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CONCLUSION AND NEXT STEPS

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CONCLUSION OF DATA COLLECTION



- Data for flood protection works for 2020 and 2040 are not available (plans are not available from MCs)
- Filling of data gaps will take significant effort and time

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PROPOSED NEXT STEPS (1)



1. Defer the formulation of development scenarios for flood protection for 2020 and 2040 until after the assessment of flood impacts as a result of developments in the other thematic sectors
2. Flood Team to focus in close collaboration with the Modeling Team on assessing the flood impacts associated with the development scenarios of the other thematic sectors

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PROPOSED NEXT STEPS (2)



3. In lieu of developing specific development scenarios for 2020 and 2040, formulate strategic directions for integrated flood risk reduction (as included in the interim report) for the cumulative development scenarios
4. Take advantage of the Initial Study to formulate strategic directions that will mitigate the flood risk of developments in other sectors

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The RTWG is requested to:



- Take note of progress
- Consider the proposed next steps to develop strategic directions for integrated flood risk reduction instead of formulating 2020 and 2040 development scenarios at this time and work with Modeling Team for the assessment of flood risk
- Provide overall feedback and guidance at this time when necessary

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Thank You



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