International Workshop

on

Flood Risk Reduction and Land Management in the Mekong River Basin

Sustained Implementation and Planning for Future Challenges

Component 5: Land Management
Review of Activities and Outputs, Lessons Learned

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5 Components of the Flood Management and Mitigation Programme (FMMP) of MRC

- Component 1: The Establishment of a Regional Flood Management and Mitigation Center.
- Component2: Structural Measures and Flood Proofing.
- Component3: Enhancing Cooperation in Addressing trans-boundary flood issues.
- Component4: Flood Emergency Management Strengthening .
- Component5: Land Management - Flood Information Based Land Management .

Why is Flood Information Based Land Management (FIBLM-C5) Important for Cambodia?

- Flood, especially Mekong floods is a recurrent event in Cambodia with large parts of the territory affected by floods.
- In Cambodia agriculture is the predominant land use. Unplanned use of agriculture land can easily get affected by floods.

Map of River Network and Flooded Area in 2000

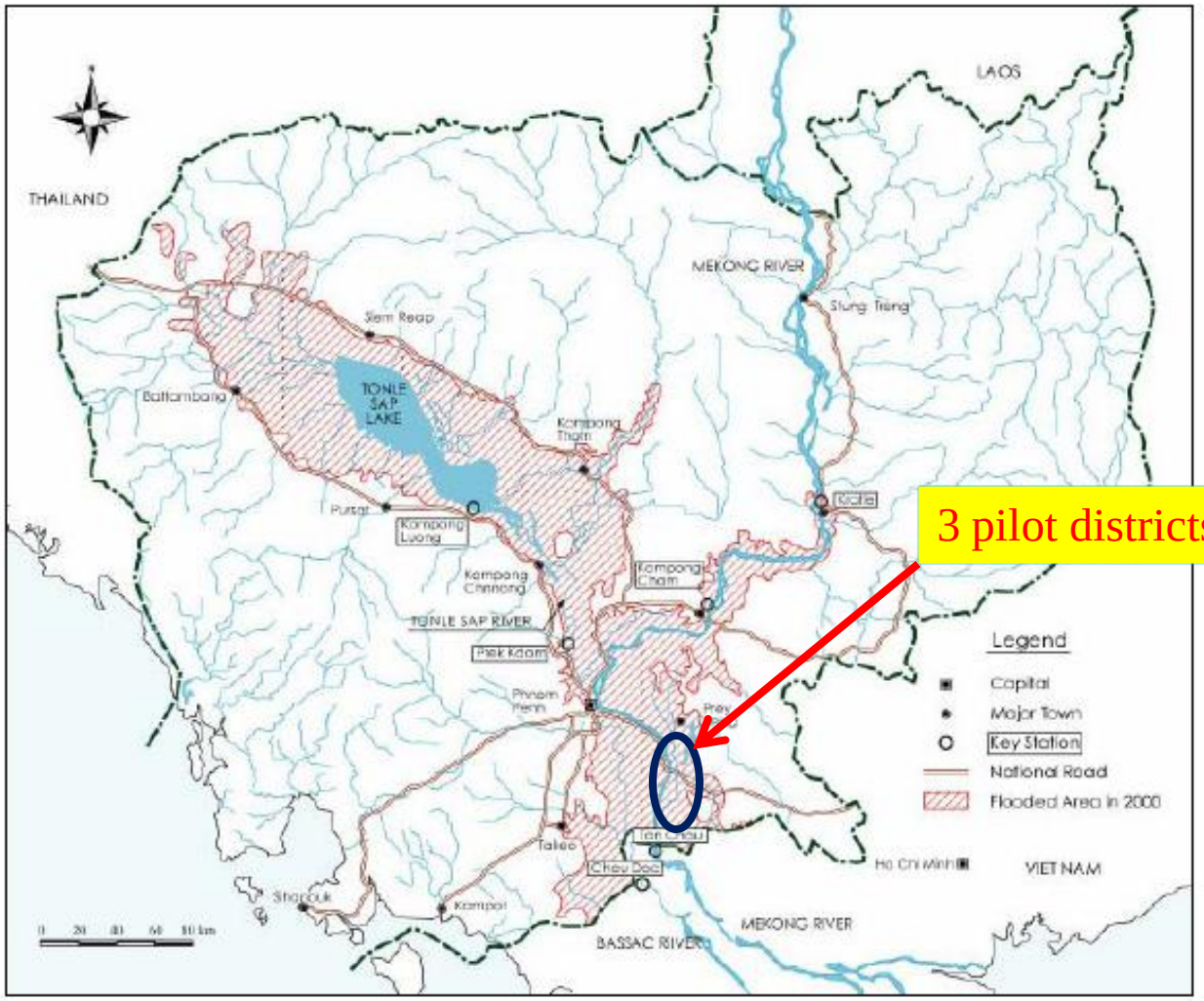

Figure 1: Map of River Network in Cambodia

Proposed Main Outputs/Activities (PIP)

- Establish an open access database and produce the flood probability maps.
- Develop the training modules and conduct the training courses in pilot areas.
- Produce documentation on improved land management.

Overall Key Activities of C5

- National and Regional Meetings and Workshops
- Establishment of a National Working Group
- Training
- Production of Training materials and guidelines
- Field visit and study tour

Implementation History

- Phase 1 (2004-2008): Development of an approach to generate flood probability maps with a scale of 1:10, 000 in the three pilot districts of Leuk Dek, Lovea Em, and Peam Ro of the two provinces of Kandal and Prey Veng.
- Phase 2 (2008-2011): Adaptation of the developed technical tools (software) for an improved Flood Information Based Land Management.

Activities and Outputs Phase 1

- Flood probability maps with a scale of 1:10, 000 for three pilot districts produced.
- Training of trainers (TOT) on production and use of flood probability maps been provided to key agency staff.
- Officials from relevant lines agencies and local authorities from the pilot provinces been trained by the trainers on production and use of flood probability map.

Activities and Outputs Phase 1 (Cont.)

- A documentation describing the processes for data analysis and for deriving the statistics produced and also available in Khmer.
- A guide on how to use the software package produced and also available in Khmer.

Activities and Outputs Phase 2

- Installation of flood marks and billboards in the two pilot districts in Kandal and Prey Veng provinces by the Department of Hydrology and River Works of the Ministry of Water Resources and Meteorology.
- Training of trainer for Land Management Department of the Royal University of Agriculture.
- Training on production of flood probability maps provided to key line agencies.
- Training on use of flood probability maps provided to relevant agencies and local authorities.

Activities and Outputs Phase 2 (Cont.)

- Updated data for production of flood probability maps for the three districts produced during Phase 1.
- Construction of 5 safety areas in three pilot districts.
- Provided communication and transportation means to communities in the pilot district (such as boats, bicycles & mobile phones).

Fig 20: Flood billboard at Peam Raing Leu village of Leuk Dek district

Lesson Learned

- Flood probability map is useful for flood plain management, flood disaster preparedness, agricultural planning, rural infrastructure planning etc.
- Strong demand for flood probability information.
- Flood probability map was not widely use for its expected purposes due to various reasons.
- More training is needed for province and district levels.
- Trainees should come from a variety of agencies.

Lesson Learned

- Meaningful application requires inter-disciplinary working groups.
- Coordination and cooperation between the institution responsible for land use planning and the institution responsible for flood forecasting and early warning need to be strengthened.
- The FMMP-C5 -methodology for mapping flood statistics has been shown to be reliable for three pilot areas in the Cambodian floodplains.

Recommendation

- Extension of the flood probability map coverage and the sustainability of map production are necessary.
- Department of Hydrology and River Works, in cooperation with other agencies, should continue to establish more flood marks in other areas, collation and processing of the data, and production of the flood probability map and provide the map as a service to other, “data & map using“ agencies.

Recommendation

- Need to promote widely use of flood probability maps in other areas.
- Accuracy of the flood probability need to be checked by visiting the site of the map.

Thank you for your attention !...