



Mekong River Commission

For Sustainable Development

RFMMC

Regional Flood Management and Mitigation Center

Annual Flood Report 2005

May 2006

Flood Management and Mitigation Programme



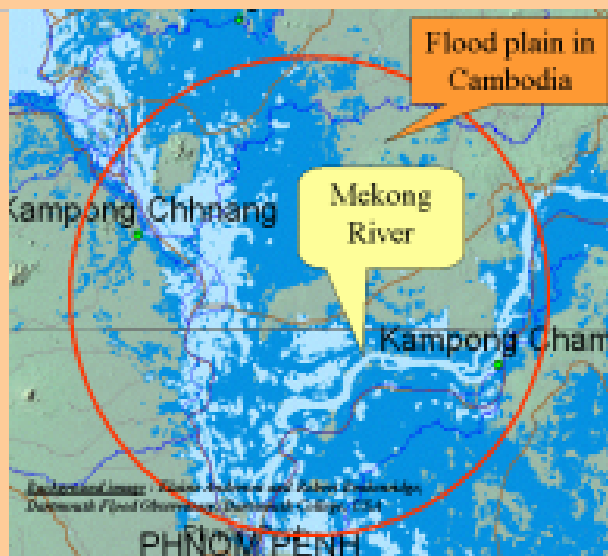
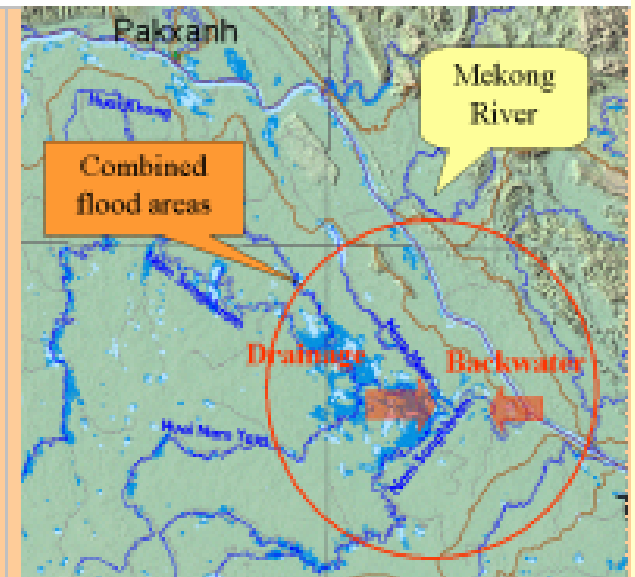
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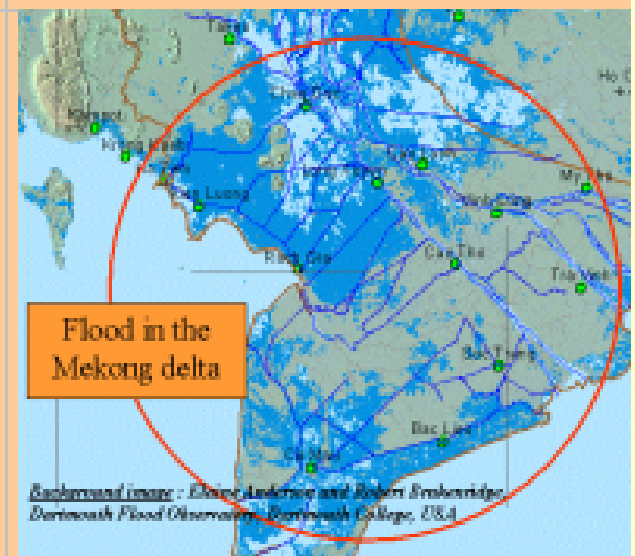
1. overview

1. **This is the first annual flood report of MRC for LMB, so no standard procedure has been set up.**
2. **It is the result of a join exercise with stakeholders involved and affected by the flood.**
3. **The report was prepared 3 months after the flood, so many data could not be collected.**
4. **In future, the report should be prepared by monitoring the flood events.**

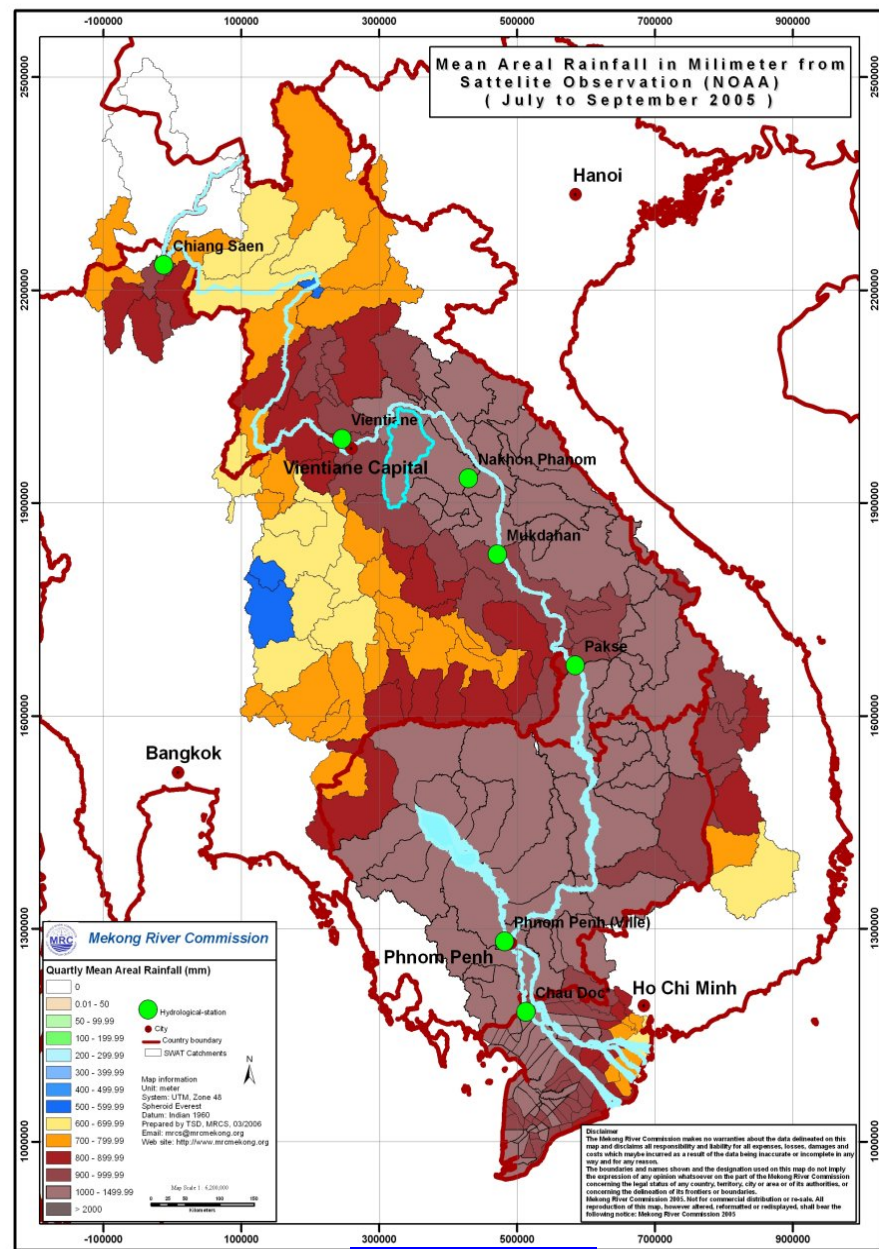
1. Types of floods in LMB



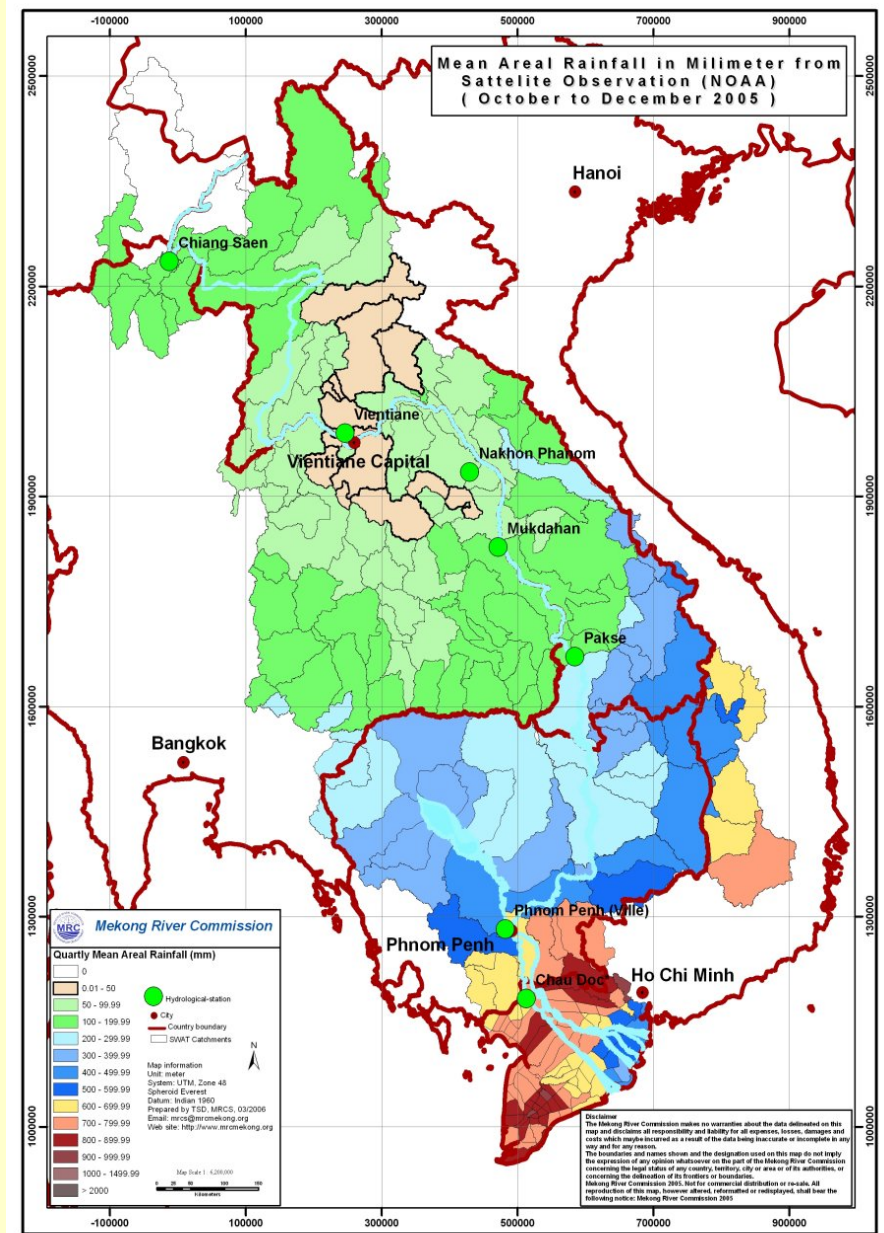
Pictures of areas sensitive to flooding events. Causes and nature of inundation vary totally from one case to another. Flood may be quite exceptional, short and violent in some cases. It can be an annual smooth raise of the water level during long periods in other places. Strategies to be applied for management and mitigation are totally different as well.



2. Spatial Distribution of Rainfall for 3rd & 4th quarters of 2005

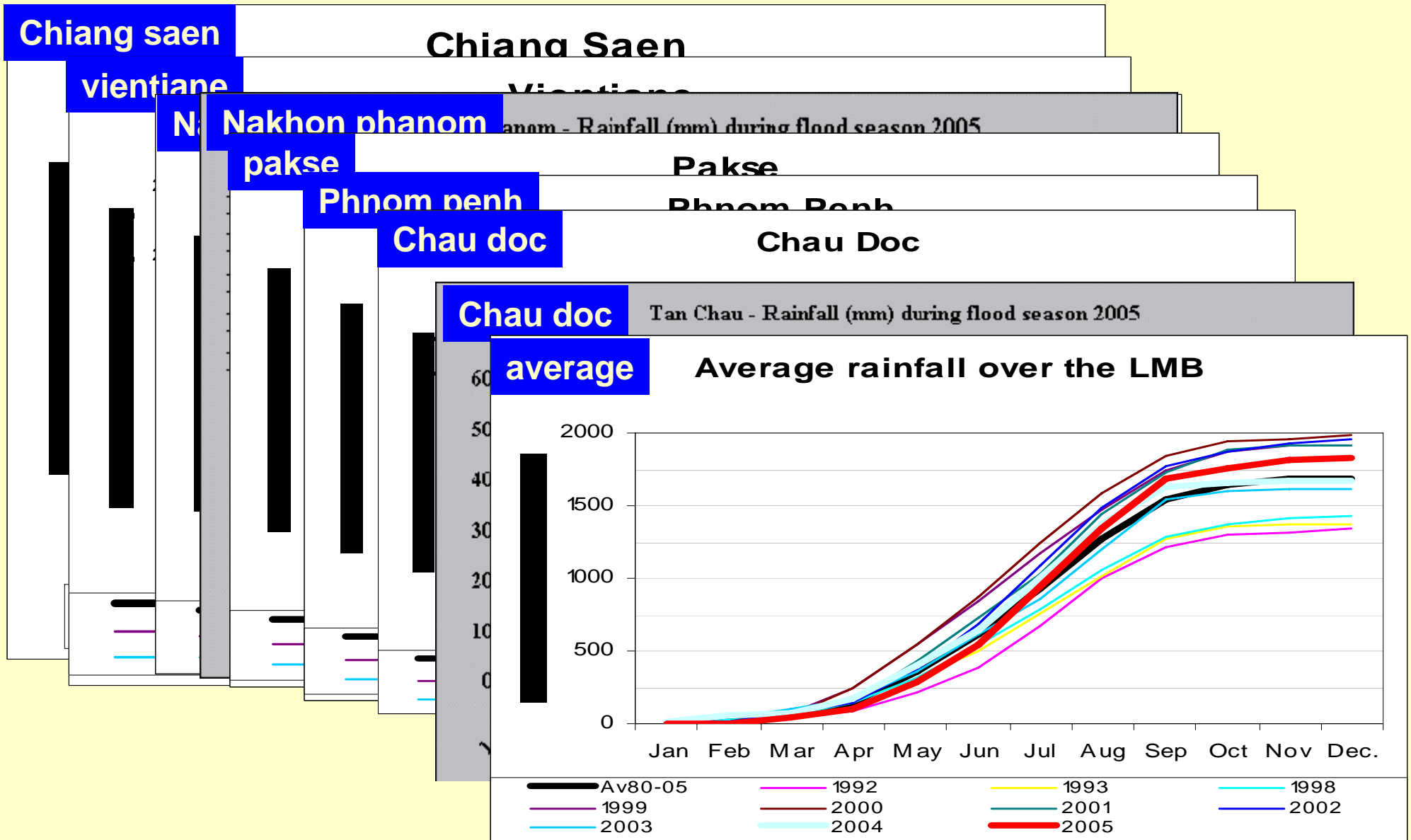


Jul-Sep

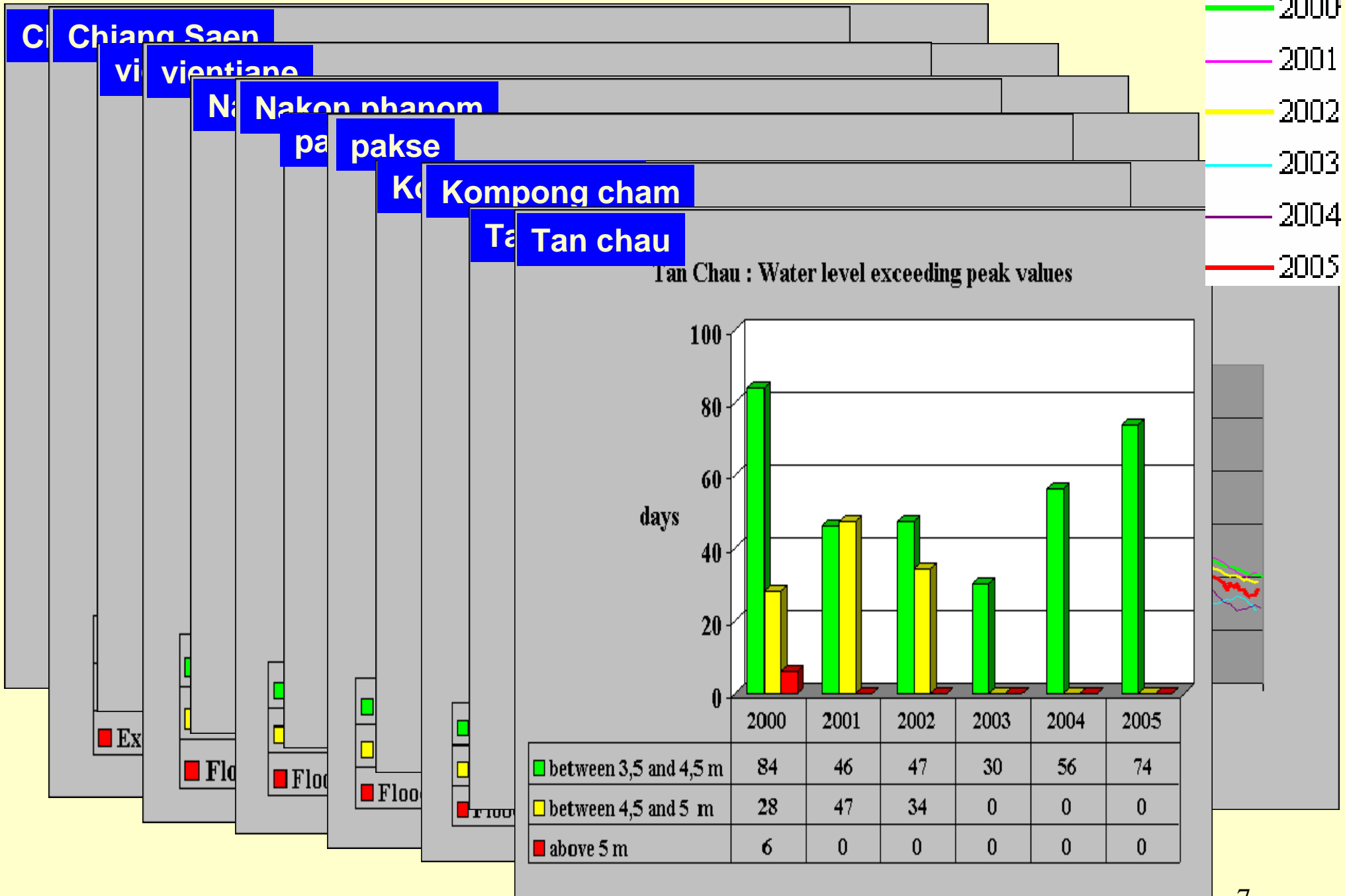


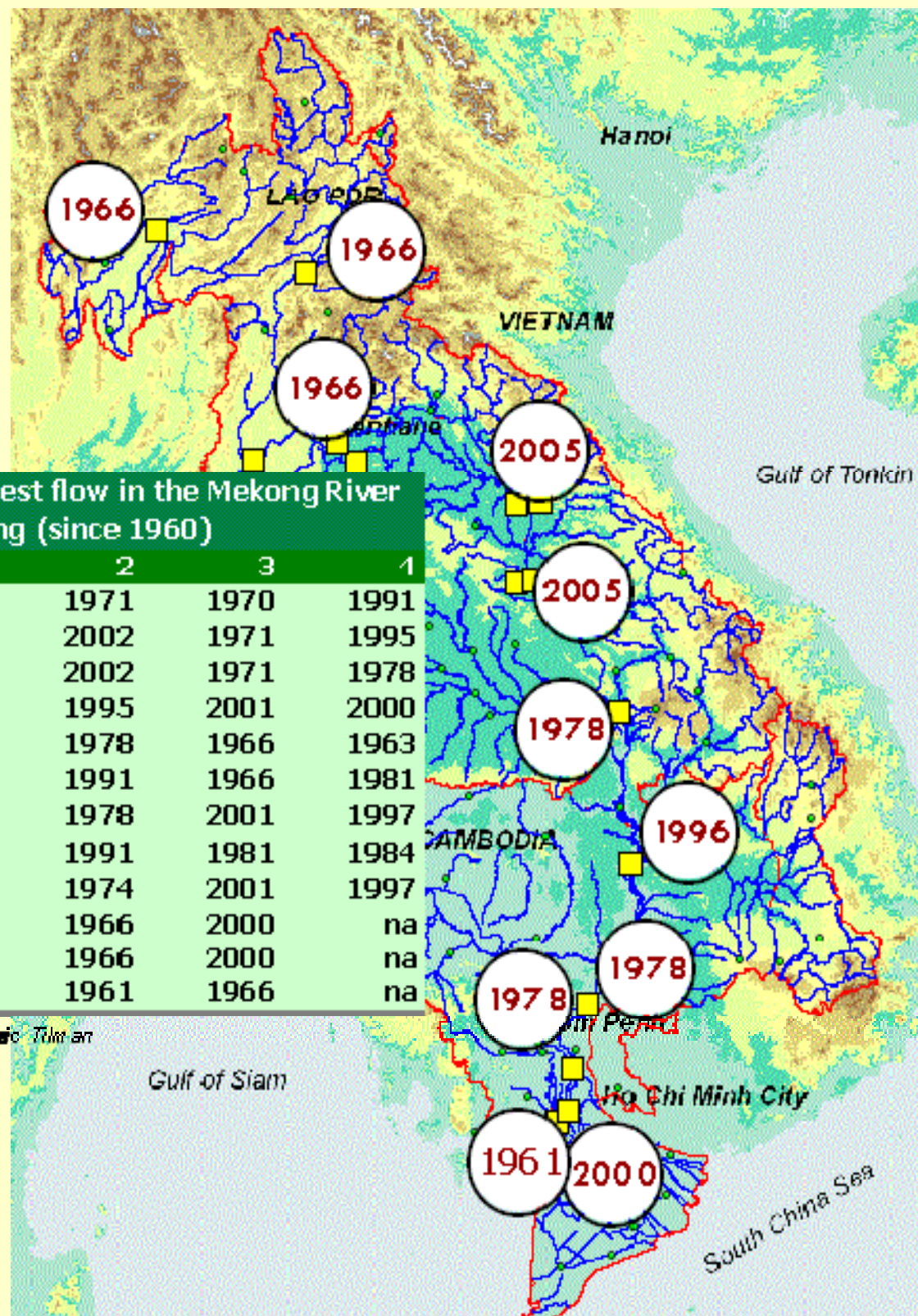
Oct-Dec

2. Accumulative Rainfall during 2005 at key stations



2. Hydrographs and Water level exceeding peak values





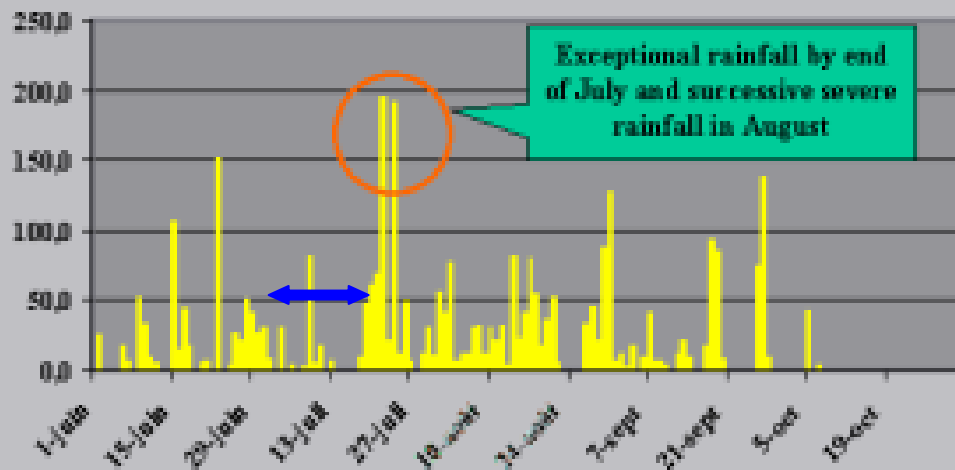
Ranking of years with highest flow in the Mekong River since recording (since 1960)

Hydro-Station	1	2	3	4
Chiang Saen	1966	1971	1970	1991
Luang Prabang	1966	2002	1971	1995
Vientiane	1966	2002	1971	1978
Nakhon Phanom	2005	1995	2001	2000
Mukdahan	2005	1978	1966	1963
Pakse	1978	1991	1966	1981
Stung Treng	1996	1978	2001	1997
Kratie	1978	1991	1981	1984
Kampong Cham	1978	1974	2001	1997
Tan Chau	1961	1966	2000	na
Can Tho	1961	1966	2000	na
Moc Hoa	2000	1961	1966	na

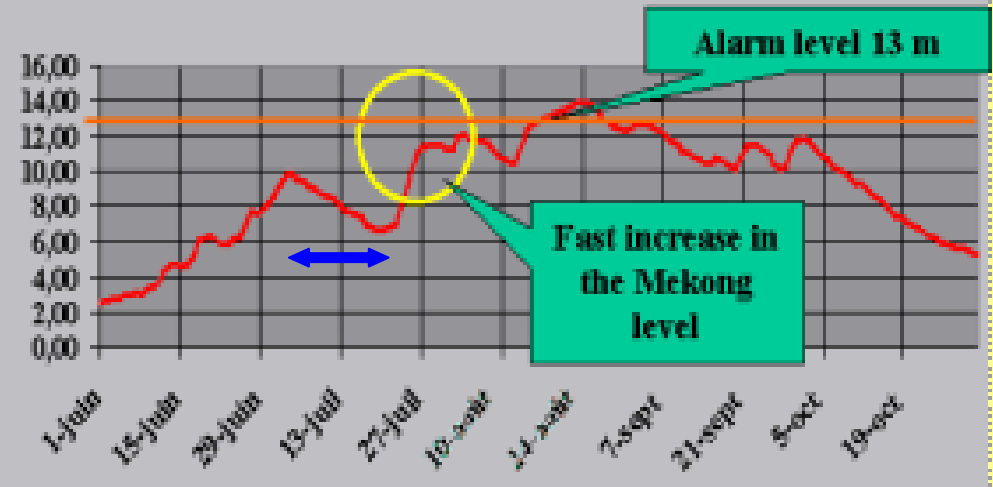
Data treatment : Peter Adamson and Eric Tilmann

2. Explanation of the severe flood in Lao and Thailand

Thakhek - Rainfall (mm) during flood season 2005



Thakhek - Flood 2005 - Water level in the Mekong River



3. Impact of the floods



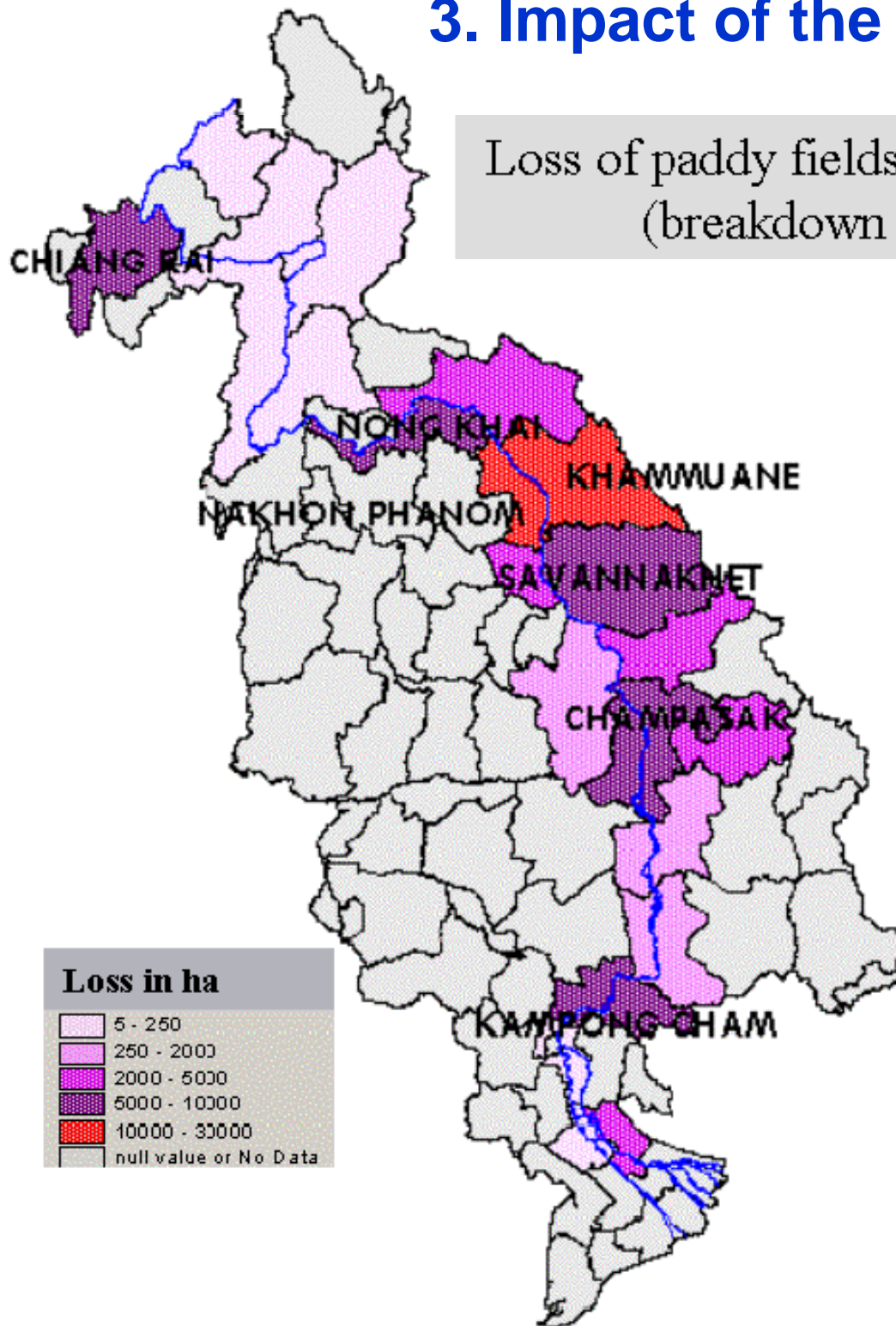
- Section not affected by flood in 2005
- Section normally affected by flood in 2005
- Section affected by flood in 2005
- Section severely affected by flood in 2005
- Section exceptionally affected by flood in 2005

3. Impact of the floods

Estimation of damages of the flood 2005 at Mekong River Basin level (consolidation of data considered as sufficiently coherent for comparison)					
Provinces	Laos	Cambodia	Thailand	Vietnam	Total
People affected					
Nr of provinces affected	16	4	5	8	33
Nr of districts affected	84	35	23	2	144
Nr of Communes affected	NA	195	234	NA	NA
Nr of villages affected	2.510	NA	NA	NA	NA
Nr of Families affected	85.553	29.549	78.121	NA	NA
Nr of people affected	480.913	14.408	NA	NA	NA
Houses severely damaged/collapsed	NA	NA	1.275	4.303	NA
People died from flood (2)	4	19	0	77	100
People evacuated to safe places	356	4.805	NA	NA	NA
Agricultural production					
Rice planted (ha)	687.555	NA	NA	NA	NA
Paddy field loss(ha)	55.955	9.906	39.538	3.876	109.275
Loss of livestock (Unit)(1)	2.124	28	0	0	2.152
Loss of fishponds (ha)	296	NA	759	NA	NA
Damages to infrastructure					
(only scattered information is available - consolidation for MRB may not be done)					
Total estimate of damages in MUS\$	28,56	NA	NA	15,27	NA
source and comments related to data : see country reports					
(1) includes buffalows, cows, pigs, goats					
(2) data regarding flash floods not available					

3. Impact of the floods

Loss of paddy fields by flood 2005 in ha
(breakdown by province)



4. responses to the floods in thailand

Th

1.

2.

3.

Huai Mong

Huai Luang

Nakhon Phanom

Pak Mun

4. responses to the floods in lao pDR

Lao PDR

1

2

3

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4. responses to the floods in cambodia



4. responses to the floods in vietnam



4. responses to the floods in FMMP

MRCS-FMMP

1. Project on the provision of flood early warning to flood vulnerable communities in LMB: Phase 1 in Lao and Cambodia.
2. Project on Flood Emergency Management Strengthening in Vietnam and Cambodia.
3. Project on Capacity building for planning and implementation of the flood preparedness programme at provincial and district level in Vietnam and Cambodia.
4. Provide daily short-term forecast for the main stream at 21 key stations.

5. Lessons learned

- **Source of data is available at different levels with different formats and indicators.**
- **The financial assessment of damage is limited due to lack of expertise and time.**
- **The concept of damage is sometime different from country to country.**
- **The available data are in local language.**

6. Recommendation for the next report

- **refine the objectives of the report in line with FMMP.**
- **Define the important indicators for the report.**
- **Set up the efficient and coherent procedures for collecting the information.**
- **set up the collaboration for getting the satellite image.**
- **Prepare the report with monitoring the flood events.**

The flood in Thailand



The flood in Laos



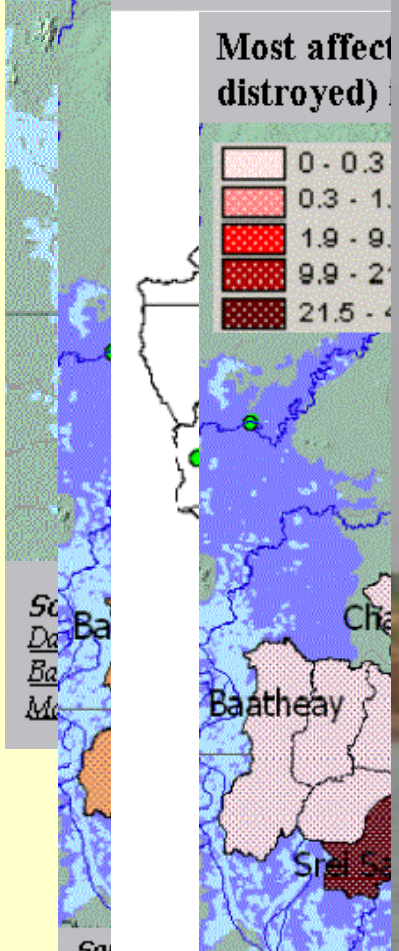
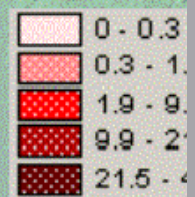
Soc
Dal
Map : Mek

The flood in Cambodia

Localisation of villages where destroyed houses Location of villages where houses were flooded

Nr of people who d
an
% of rice field

Most affect
(destroyed)



Sources :
Data : Cambodia -
Background image
College, USA
Map : Mekong River Commission Secretariat - March 2006



The flood in



Thank you
for your attention