

# **Mekong River Commission**

## **Regional Flood Management and Mitigation Centre**

Weekly Dry Season Situation Report for the Mekong River Basin

Prepared at: 01/01/2019, covering the week from 25st to 31 December 2018

Weather Patterns, General Behaviors of the Mekong River and Dry Season Situation

#### **General weather patterns:**

There an abnormal rainfall over the upperpart of the Lower Mekong Basin, during this week. This week from 25<sup>st</sup> to 31 December 2018, water levels at stations in the upper part of LMB were rising above their long-term averages (LTAs) due to abnormal rainfall and inflow from upstream catchments, while at downstream part has water levels were significantly stay below their LTAs condition.

#### General behavior of the Mekong River:

From 25st to 31 December 2018, water levels along the lower Mekong River from Thailand's Chiang Saen to Lao PDR's Luang Prabang were increased and reached above their LTAs due to the catchment's inflows from upstream. The trends were the same for the stations from Lao PDR's Vientiane to Cambodia's Kratie. The lower reaches from Cambodia's Phnom Penh at Chaktomuk to Neak Lueong, the trend of water levels were below their LTAs. However, at Viet Nam's Tan Chau on the Mekong River and Chau Doc on the Bassac River water levels were fluctuated around their LTAs.

#### For stations from Chiang Saen and Luang Prabang

Water levels from 25<sup>st</sup> to 31 December 2018 at Chiang Sean and Luang Prabang stations increased, due to the catchment inflow from upstream parts.

#### For stations from Chiang Khan, Vientiane-Nong Khai and Paksane

The same trends were observed from 25st to 31 December 2018 at Chiang Khan, Vientiane and Nong Khai, water levels were decreased slightly below their LTAs the same trend as upstream. It was observed that at Paksane station, water levels were significantly dropped below its LTA. This would suggest of the impact of upstream hydro-power operation of Nam Ngum.

#### For stations from Nakhon Phanom to Pakse

Water levels from 25<sup>st</sup> to 31 December 2018 at Nakhon Phanom to Pakse were gradually increased, following the same trend from upstream and stay above their LTAs.

#### For stations from Stung Treng to Kratie

Water levels from 25st to 31 December 2018 at Stung Treng to Kratei were increased slighly and stay over their LTAs.

#### For stations from Kompong Cham, Phnom Penh to Prek Kdam

Water levels from 25<sup>st</sup> to 31 December 2018 at Kompong Cham to Prekdam on the Tonle Sap and Chaktomuk on the Bassac were decreased and stay below their LTAs.

#### Tan Chau and Chau Doc

Water levels from 25<sup>st</sup> to 31 December 2018 at Tan Chau on the Mekong and at Chau Doc on the Bassac were fluctuated around their long-term averages (LTAs). It was observed there were different trends, compared to previous years.

#### **Dry season situation**

Compared to the Long-Term Averages (LTAs), water levels at stations from Chiang Sean to Chiang Khan were stay above their LTAs, except from Vientiane to Paksane water levels were stay below their LTAs. From Kompong Cham to Neak Lueong water levels were decreased below their LTAs. For the tidal stations at Tan Chau and Chau Doc, water levels were different trend of fluctuation with previous years.

For details information on water levels and rainfall at each key station are described as follows:

- Tables for observed water levels and rainfall for the last week in Annex A
- The water levels graphs showing the observed water levels for the season in Annex B

## **Annex A: Graphs and Tables**

Table A1: observed water levels

Unit: m

2019	Jinghong	Chiang Saen	Luang Praban	Chiang Khan	Vientiane	Nongkhai	Paksane	Nakhon Phanom	Mukdahan	Pakse	Stung Treng	Kratie	Kompong Cha	Phnom Penh (Bassac)	Koh Khel	Neak Luong	Prek Kdam	Tan Chau	Chau Doc
25/12/2018	-	3.45	8.78	5.14	1.70	2.32	2.35	2.28	2.58	1.84	3.03	8.14	3.90	2.96	2.97	2.45	2.59	1.21	1.28
26/12/2018	-	3.55	8.78	5.12	1.70	2.26	2.35	2.14	2.45	1.84	3.01	8.19	3.89	2.92	2.88	2.48	2.54	1.29	1.39
27/12/2018	-	3.32	8.92	5.40	1.60	2.20	2.37	2.08	2.33	1.72	3.07	8.17	3.89	2.81	2.82	2.54	2.45	1.48	1.61
28/12/2018	-	3.23	9.17	5.68	1.74	2.28	2.37	2.08	2.30	1.63	3.03	8.23	3.96	2.90	2.88	2.56	2.42	1.56	1.71
29/12/2018	-	3.19	9.24	6.18	2.26	2.50	2.39	2.08	2.30	1.60	2.98	8.22	4.01	2.99	2.90	2.56	2.56	1.65	1.79
30/12/2018	-	3.36	9.09	6.34	2.45	2.85	2.40	2.10	2.32	1.55	2.98	8.12	3.98	3.03	2.94	2.40	2.45	1.57	1.71
31/12/2018	-	3.69	8.49	6.14	2.62	3.16	3.10	2.17	2.35	1.60	2.96	8.03	3.92	3.04	2.86	2.36	2.39	1.53	1.67

Table A2: observed rainfall

Unit: mm

2019	Jinghong	Chiang Saen	Luang Prabang	Chiang Khan	Vientiane	Nongkhai	Paksane	Nakhon Phanom	Mukdahan	Pakse	Stung Treng	Kratie	Kompong Cham	Phnom Penh (Bassac)	Koh Khel	Neak Luong	Prek Kdam	Tan Chau	Chau Doc
25/12/2018	-	0	0	0	0	0	0	0	0	0	0	0	0	0	2.9	0.5	0	0	0
26/12/2018	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.9	55
27/12/2018	-	0	0	0	0	0	0	0	0	0	0	0	0	13.2	6	7.4	0	0	64
28/12/2018	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.8	18
29/12/2018	-	4.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30/12/2018	-	4.7	0	2.7	0	0	0	0.7	1	0	0	0	0	0	0	0	0	0.7	12
31/12/2018	-	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: No data available from China during the Dry Season

#### **Annex B: Season Water Level Graphs**

This Annex has the water level graphs of the report date. These graphs are distributed weekly by email together with the River Monitoring Bulletin.

# HYDROGRAPH AT 7 AM OF MEKONG TONLE SAP AND BASSAC AT MAINSTREAM STATIONS IN DRY SEASON FROM 25 to 31 DECEMBER 2018



































