Updates of Water Environment Governance in Cambodia

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1. Goals of water environment

- The purpose of water environment governance in Cambodia is to regulate the water pollution control in order to prevent and reduce the water pollution of the public water areas so that the protection of human health and the conservation of biodiversity shall be ensured.
- Regulatory frameworks support water environment governance have been developed and promulgated:
  - Cambodian constitution 1993 Article 59
  - Laws on Environmental Protection and Natural Resource Management (1996)
  - Sub-decree No.27 on Water Pollution Control (1999) and Sub decree No.103 on revised Water Pollution Control (2021)
  - Prakas 263 on Water Quality Index
  - Prakas 021 on Classification of EIA for development project

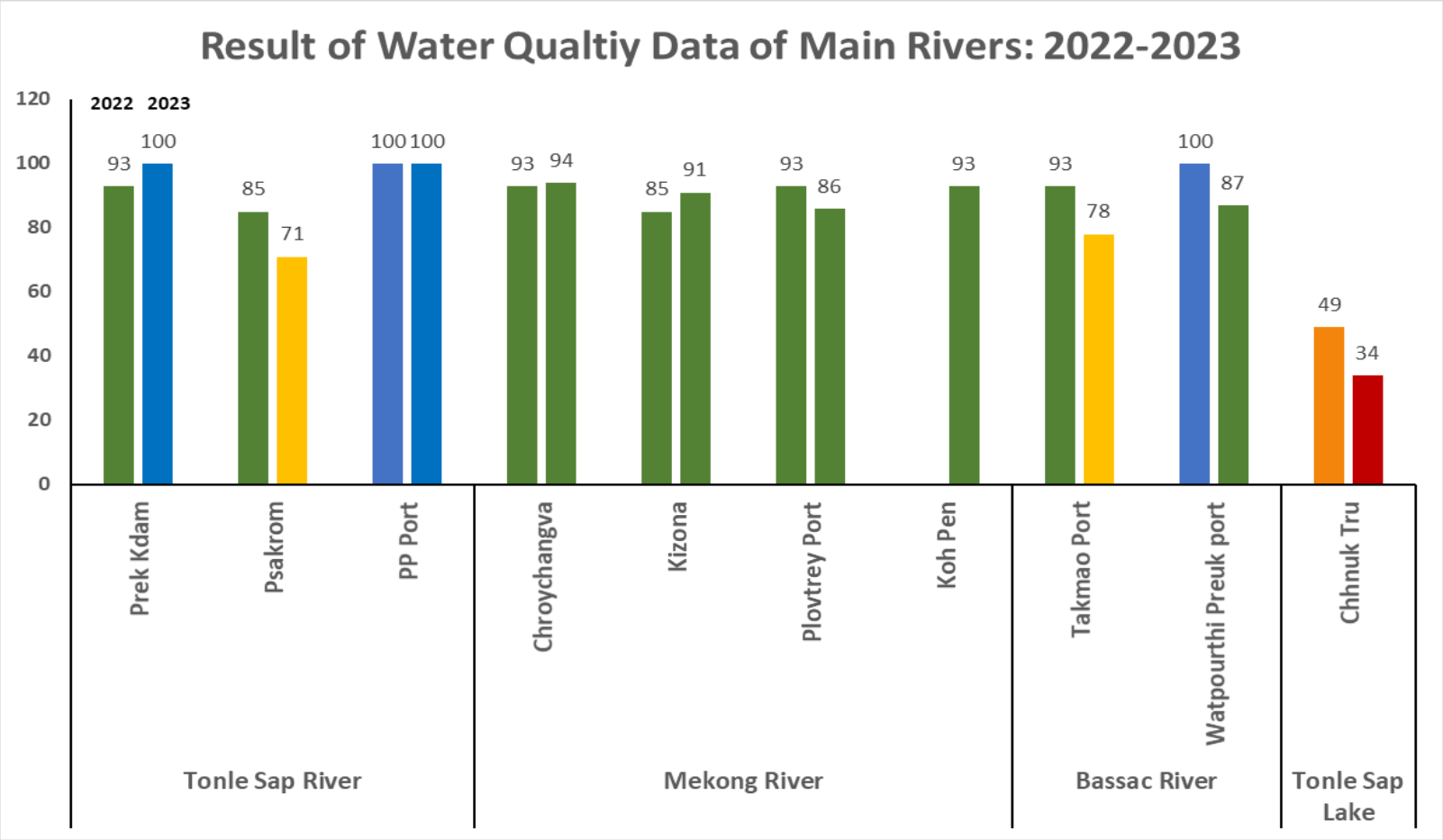
2. Assess the status of water environment

- Regularly monitoring water quality at:
  - Public water areas: 18 stations in 10 targeted provinces
  - Sea water: 8 stations in 3 targeted provinces
  - Hot Sport: 12 stations in 3 targeted provinces
  - WWTP Effluent: 4 stations in 2 targeted provinces
  - Natural purification pond: 2 stations in 2 targeted provinces
  - Automatic water quality monitoring station





2. Assess the status of water environment



កំណត់សម្គាល់៖ (*) សន្ទស្សន៍គុណភាពទឹក Water Quality Index—WQI)

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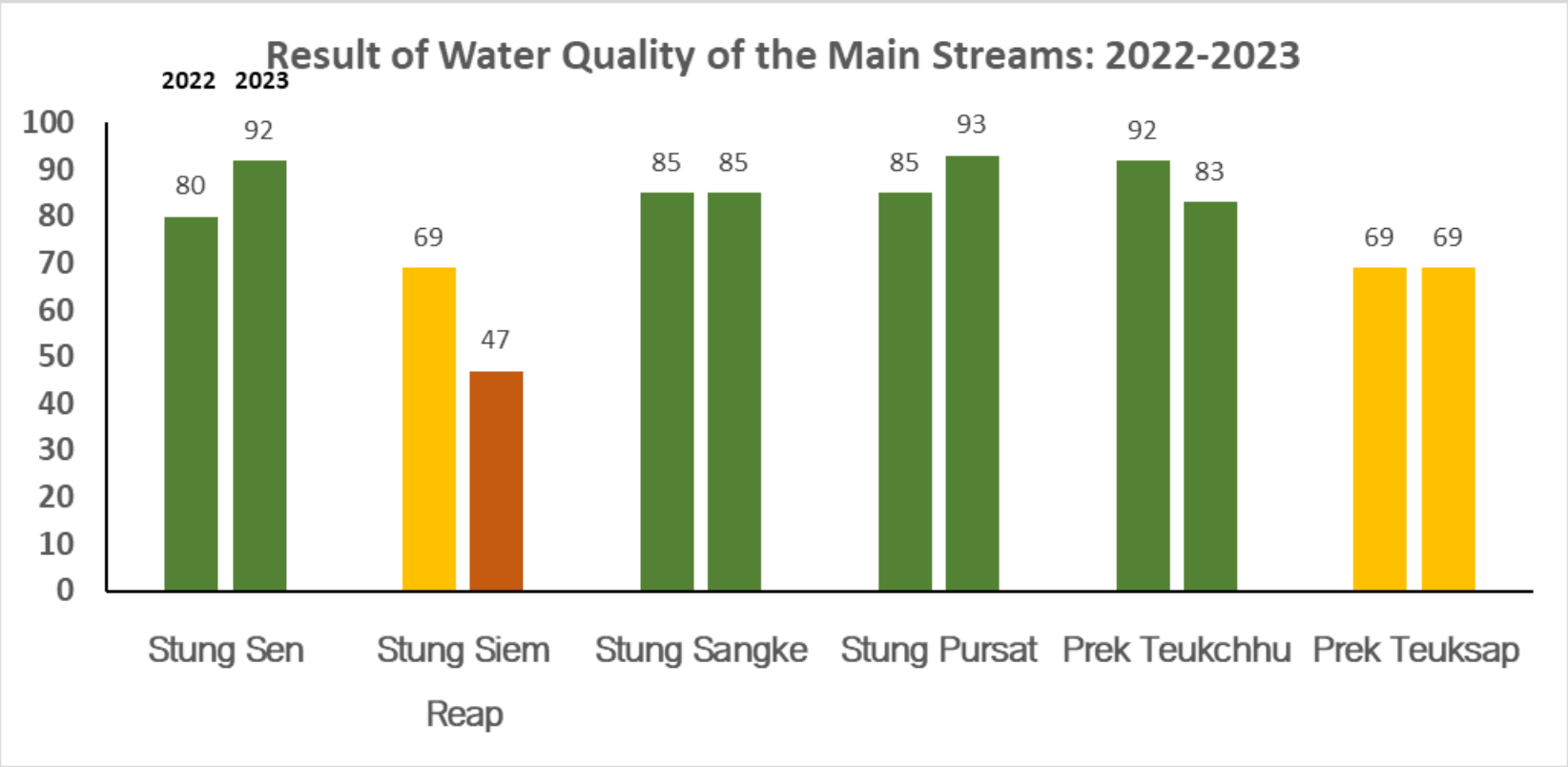

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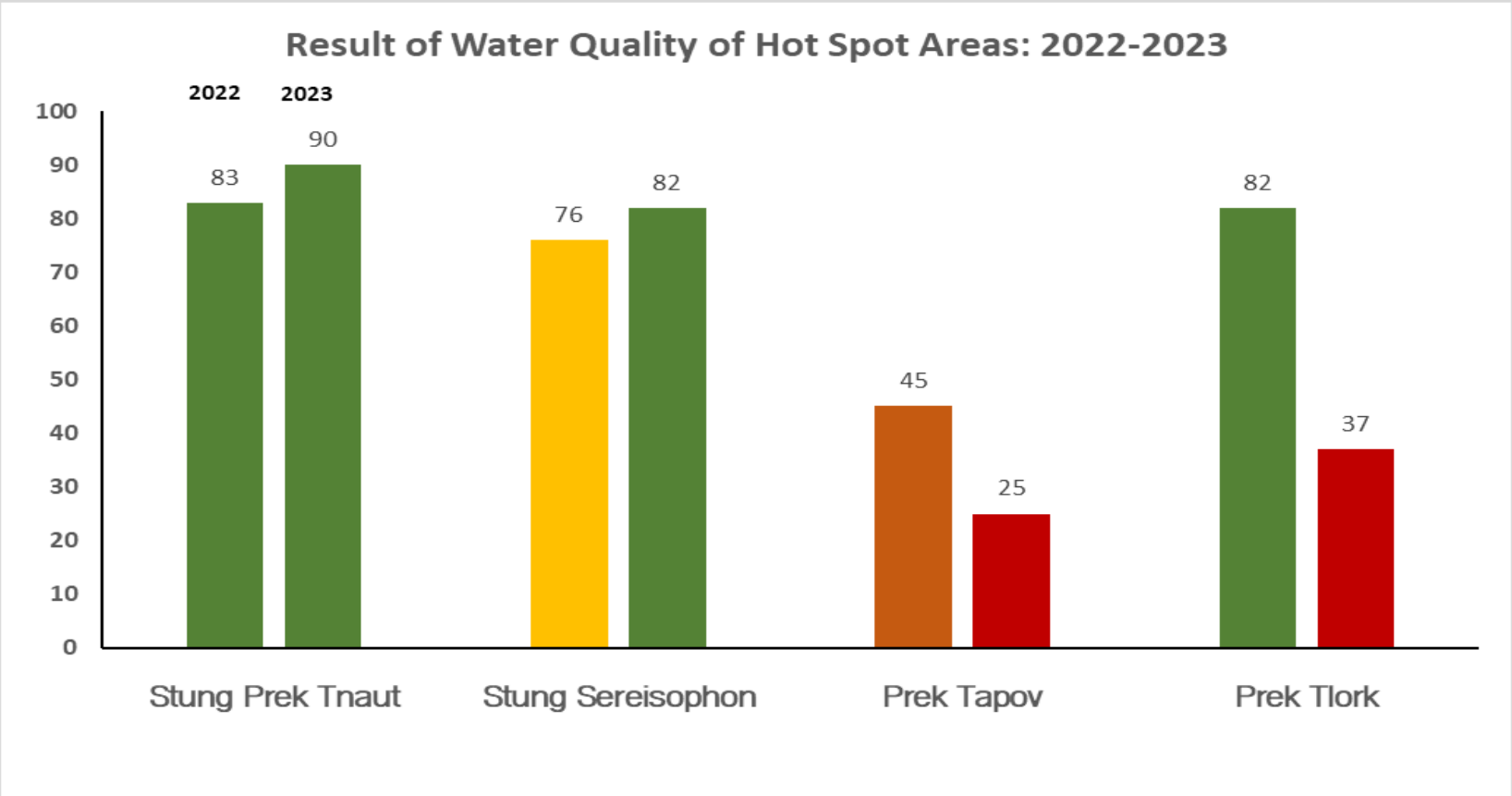

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2. Assess the status of water environment

Results of Effluent Quality in Average of Targeted WWTP for 2023

ល.រ	ចំណុចយកសំណាក	pH	DO (mg/l)	TSS (mg/l)	BOD_5 (mg/l)	COD_{Cr} (mg/l)	NO_3^{-1}-N (mg/l)	T-N (mg/l)	T-P (mg/l)
1	ស្ថានីយប្រព្រឹត្តិកម្មទី១	7.39	5.7	5.00	17.92	46.00	12.70	15.38	1.50
2	ស្ថានីយប្រព្រឹត្តិកម្មទី២	7.27	3.10	3.00	35.45	43.00	7.30	14.99	0.02
3	ស្ថានីយប្រព្រឹត្តិកម្មអូរត្រែះ	7.57	050	73.84	27.31	100	13.40	15.32	1.61
4	អាងប្រព្រឹត្តិកម្មសៀមរាប	7.20	3.55	29.11	25.69	44.25	0.21	10.64	1.22
ស្តង់ដារ*		**5.5-9**	**-**	**<100**	**<60**	**<120**	**<20**	**<40**	**<6**

**ឧបសម្ព័ន្ធ ២ នៃអនុក្រឹត្យលេខ១០៣ អនក្រ.បក ចុះថ្ងៃទី២៩ ខែមិថុនា ឆ្នាំ២០២១ ស្តីពី ការកែសម្រួលមាត្រា៤ មាត្រា៩ មាត្រា១១ មាត្រា ១២ មាត្រា១៧ និងតារាងឧបសម្ព័ន្ធ២ ឧបសម្ព័ន្ធ៣ ឧបសម្ព័ន្ធ៤ និងឧបសម្ព័ន្ធ៥ នៃអនុក្រឹត្យលេខ២៧ អនក្រ.បក ចុះថ្ងៃទី៦ ខែមេសា ឆ្នាំ ១៩៩៩ ស្តីពីការត្រួតពិនិត្យការបំពុលទឹ*

2. Assess the status of water environment

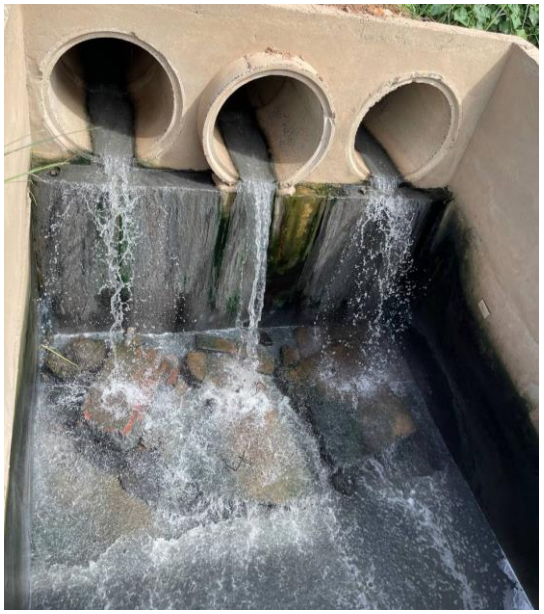
Results of Sea Water Quality in Average of Targeted Areas for 2023

ល.រ	បរិយាយ	pH	DO (mg/l)	TSS (mg/l)	COD_{OH} (mg/l)	TN (mg/l)	TP (mg/l)	NO_3^{-1}-N (mg/l)
១	ឆ្នេរអូរត្រែះ	8.18	5.78	11.26	1.42	0.91	0.02	0.16
២	ឆ្នេរអូរឈើទាល	8.15	5.82	7.33	1.74	0.60	0.02	0.18
៣	ឆ្នេរឯករាជ្យ	8.11	5.62	4.95	1.44	1.06	0.03	0.17
៤	កំពង់ផែស្វយ័តខេត្តព្រះសីហនុ	8.07	5.44	4.08	1.75	0.99	0.02	0.18
៥	ស្ពានថ្មចាស់ក្រុងកំពត	6.55	4.72	9.42	1.59	0.49	0.05	0.14
៦	កំពង់ផែកំពត	6.77	5.28	7.91	1.88	0.31	0.08	0.12
៧	ឆ្នេរលេងទឹកកែប (សិលាចាំប្តី)	8.06	6.64	36.65	1.94	1.20	0.04	0.16
៨	ផ្សារក្តាម	8.01	6.58	16.26	1.62	0.86	0.02	0.24
ស្តង់ដារ*		**7-8.3**	**>4**	**<80**	**<8**	**<2**	**<0.09**	**0.06**

**អនុក្រឹត្យលេខ១០៣ អនក្រ.បក ចុះថ្ងៃទី២៩ ខែមិថុនា ឆ្នាំ២០២១ ស្តីពី ការកែសម្រួលមាត្រា៤ មាត្រា៩ មាត្រា១១ មាត្រា១២ មាត្រា១៧ និ តារាងឧបសម្ព័ន្ធ២ ឧបសម្ព័ន្ធ៣ ឧបសម្ព័ន្ធ៤ និងឧបសម្ព័ន្ធ៥ នៃអនុក្រឹត្យលេខ២៧ អនក្រ.បក ចុះថ្ងៃទី៦ ខែមេសា ឆ្នាំ១៩៩៩ ស្តីពីការត្រួត ការបំពុលទឹក*

3. Identify pollution sources

- There are some major pollution sources cause water environmental quality degradation as followings:
  - Non Point Sources: Agricultural waste, domestic waste…etc.
  - Point Sources: Illegal industrial wastewater discharge
  - Climate change constraints



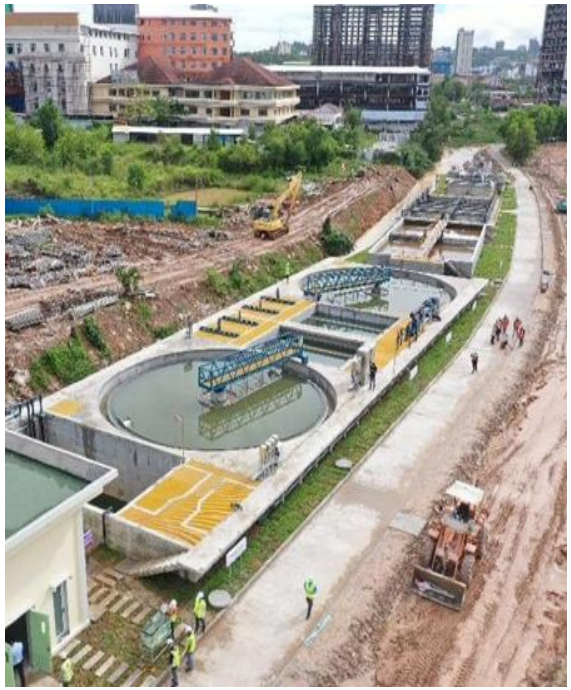
4. Implement measures to address issues

- Continuing monitoring water environmental quality at public water areas
- Strengthening implementation of existing law and regulations:
  - Regular monitoring and Inspecting pollution sources
  - If found mistake, release the administrative order letter to:
    - ✓correct small fault within a specific period,
    - ✓correct fault within a specific period but fine or stop process,
    - ✓collect and detain evidence of such offense for making statement and forward the case file to the competent agency in case of serious pollution
  - Investment companies/industries are required to complete legal procedure relevant to environment (waste disposal permits, EIA…)
  - Investment companies/industries are required to install self monitoring equipment

5. Evaluating outcomes and revising policies

Till now, there are still some issues not completely solved:

- Illegal discharge of industrial wastewater into public water areas
- Lacking of national environmental supported infrastructures (WWTP)
- Lacking of water environmental quality monitoring supported materials
- Limited self-studied capacity development and scientific based researches and innovation



5. Evaluating outcomes and revising policies

To deal with those issues and to combat the problems, the specific regulatory frameworks are developed and put into force and some research areas are taken into account:

- Circular Strategy on Environment has been developed and put into force since late of 2023
- Environmental and Natural Resource Code has been promulgated and put into force in 2024
- Drafting a Prakas on the conditions and procedures for the recognition of environmental engineering services company on wastewater treatment system

6. Challenges and future plans

- Challenges
  - Insufficient of technical officials on water environmental management
  - Lacking of technical support materials for improving water work implementation
  - Lacking of good cooperation either relevant institutions or pollution source owners
  - Owners of some pollution sources are not honest in the operation of their wastewater treatment plants

6. Challenges and future plans

- Future Plan:
  - Continuing implementation of existing law and regulatory frameworks
  - Strengthening good cooperation with relevant institutions toward water environmental protection and pollution control
  - Fastening the drafting of relevant Prakas for getting approval and being promulgated
  - Encouraging young officials for conducting scientific based researches in water environment areas

Case study: Initiative Water Governance Management plan of Prek Tapov, Svay Rieng province, Cambodia:

- The key specific objectives are as followings:
  - Identify pollution status in Prek Tapov
  - Assessment on water pollution and socio-economic impact in the areas and
  - Establishment of restoration management plan and prevention measures (Ex. PPP…)

Thank for your attention!!!