

The banner features a blue background with a water ripple effect on the left and a landscape with a river and trees on the right. The WEPA logo is positioned on the left side of the banner.

WEPA

Water Environment Partnership in Asia

WEPA Basic Policy in the 4th Phase

Overviews of WEPA

- While the Asian economy has shown remarkable development, serious water pollution problems have been occurring in this region.
- In order to solve water environment problems in Asia and achieve sustainable development, it is essential to enhance information, knowledge and systems on water environment, and [improve water environment governance](#).
- At the Third World Water Forum (2003), the Ministry of Environment, Japan proposed a network of government officials in Asia (WEPA).

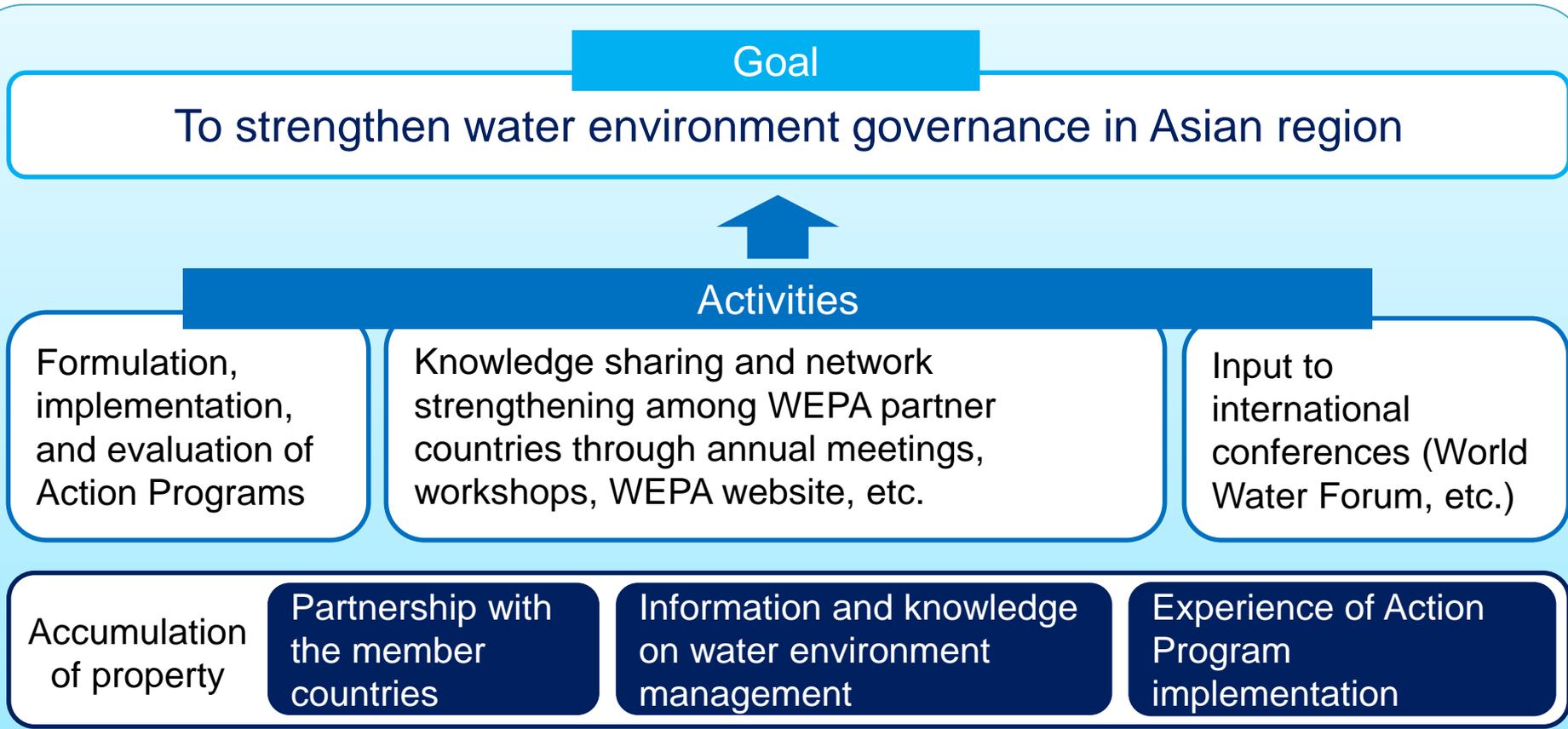
WEPA partner countries (13 countries)

1. Democratic Socialist Republic of Sri Lanka (Sri Lanka)
2. Federal Democratic Republic of Nepal (Nepal)
3. Japan (Japan)
4. Kingdom of Cambodia (Cambodia)
5. Kingdom of Thailand (Thailand)
6. Lao People's Democratic Republic (Lao PDR)
7. Malaysia (Malaysia)
8. People's Republic of China (China)
9. Republic of Indonesia (Indonesia)
10. Republic of Korea (Korea)
11. Republic of the Philippines (Philippines)
12. Socialist Republic of Viet Nam (Viet Nam)
13. Union of Myanmar (Myanmar)



Goal and activities

- Aim to contribute to improving the water environment through strengthening water environment governance in Asian region, by establishing a cooperative system among government officials involved in water environment management in the Asian region, and implementing initiatives such as collecting and disseminating information, developing human resources and capacity, and developing relevant systems in WEPA partner countries



Main initiatives from the 1st to the 3rd Phase

The 1st Phase
(April 2004~
March 2009)

Development of an information platform on water environment management

Build a platform to share knowledge and experience among the partner countries, such as database on water environmental management in Asia including goals on water environmental conservation (water quality environmental standards) and water quality status, and human networks of governmental officials in each country

The 2nd Phase
(April 2009~
March 2014)

Knowledge sharing to find solutions

Focusing on domestic wastewater treatment as a priority issue in the Asian region where urbanization is remarkable, clarify the status of pollution load in each country, the situation of domestic wastewater treatment, its issues and the direction of countermeasures, and share good practices among the partner countries

The 3rd Phase
(April 2014~
March 2019)

Actions to solve issues

Focusing on industrial wastewater treatment in addition to domestic wastewater treatment, share the status of pollution loads in each country, share knowledge and improve capacity on pollution source countermeasures, and assist in formulating Action Programs to solve issues in the partner countries

Issues based on efforts up to 3rd Phase: Not achieving standards

- Water quality monitoring is carried out in all 13 countries, with regular monitoring in 9 of those, but water quality environmental standards have not been achieved in many countries.

Water quality monitoring results in the WEPA partner countries

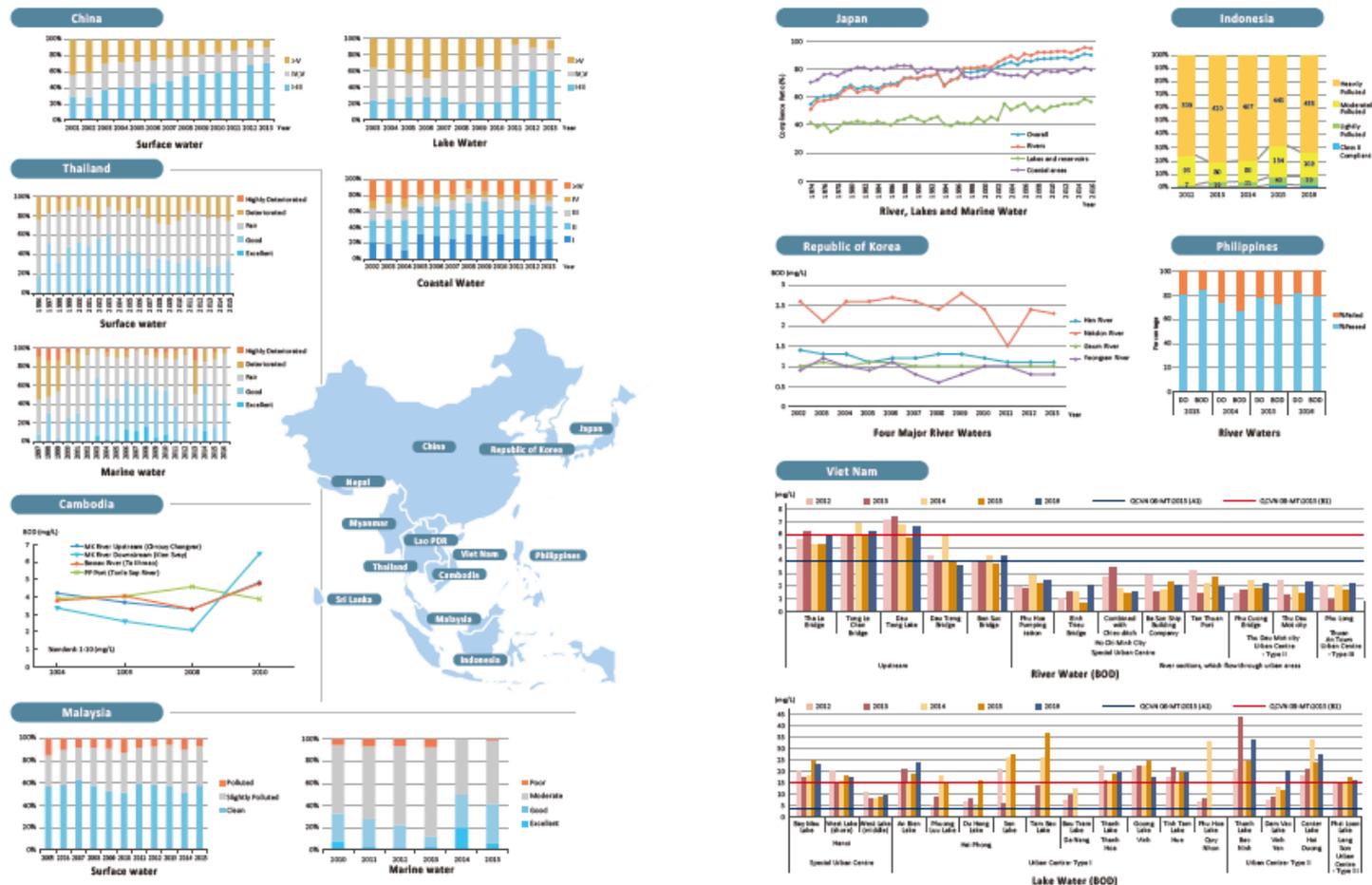
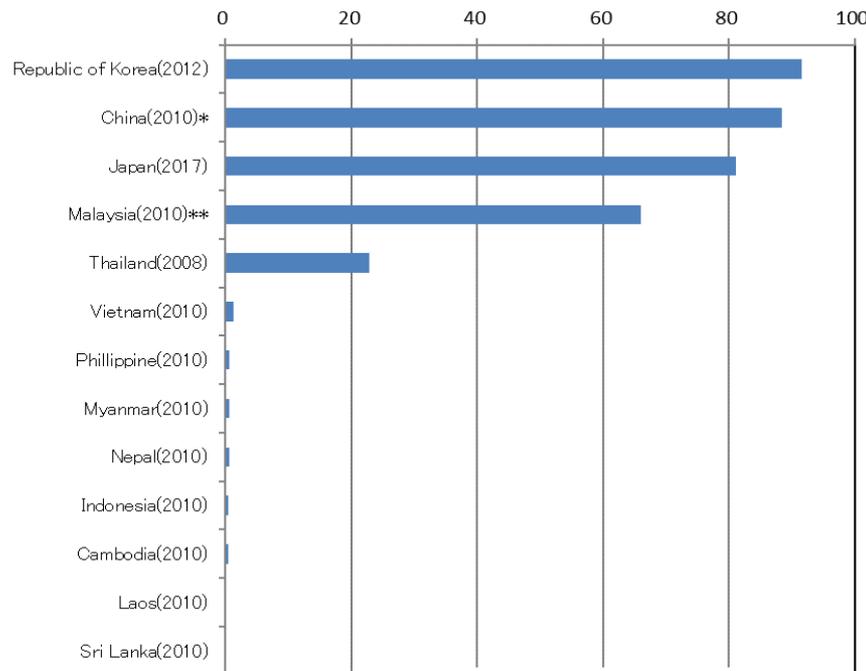


Figure 2.2. Situation of water quality in surface water or marine water of selected WEPA countries (Source: See References)

Issues based on efforts: Domestic wastewater treatment

- In many countries, sewerage treatment coverage rate for domestic wastewater is low.
- In areas where sewerage treatment is difficult, introduction of a decentralized wastewater treatment system (DEWATS) is one of the effective measures. However, in many countries, especially in urban areas, it is common to have on-site treatment using individual septic tanks which have the following problems.
 - BOD removal rate is low due to their structural and management issues.
 - Septic tanks treat only black water; grey water, which has a high BOD pollution load, is discharged untreated.

Service coverage rates of sewerage treatment in WEPA countries



*Chinese data is only for urban area
 **Except in Sabah and Sawawak province

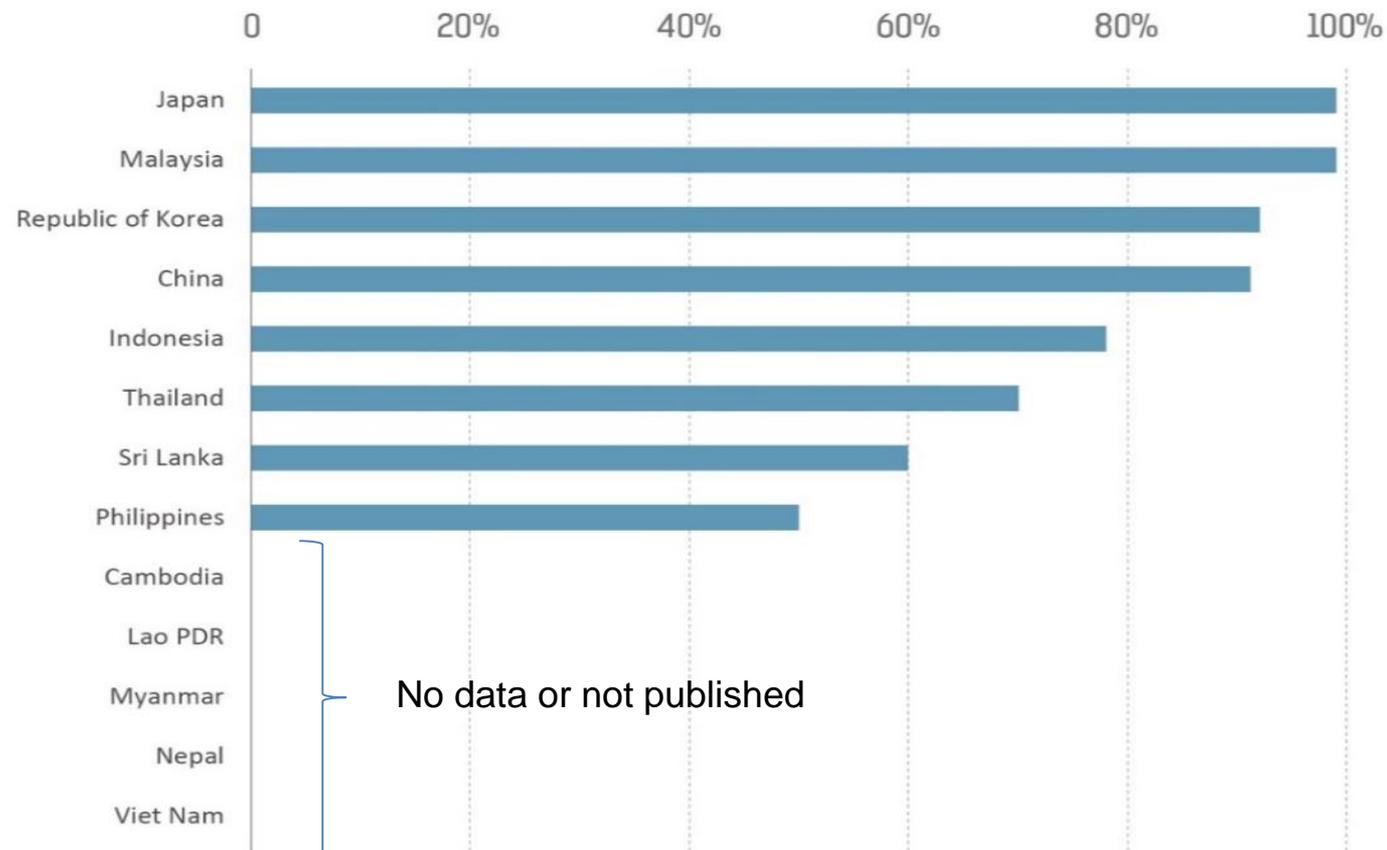
Septic tanks coverage rate in selected WEPA countries

Country	Year	Area	Coverage rate (%)
Cambodia	2008	National Average	43
Viet Nam	2008	National Average	41
		Urban Area	79
		Rural Area	26
Malaysia	2010	National Average	21
Indonesia	2011	National Average	60
		Jakarta	93
Philippines	2010	Manila	71

Issues based on efforts : Industrial wastewater treatment

- In many countries, the compliance rate of industrial effluent standards is not high, and the compliance rate is not accurately recognized by government agencies.

Compliance rate of industrial effluent standards



Issues based on efforts : Appropriateness of the standards

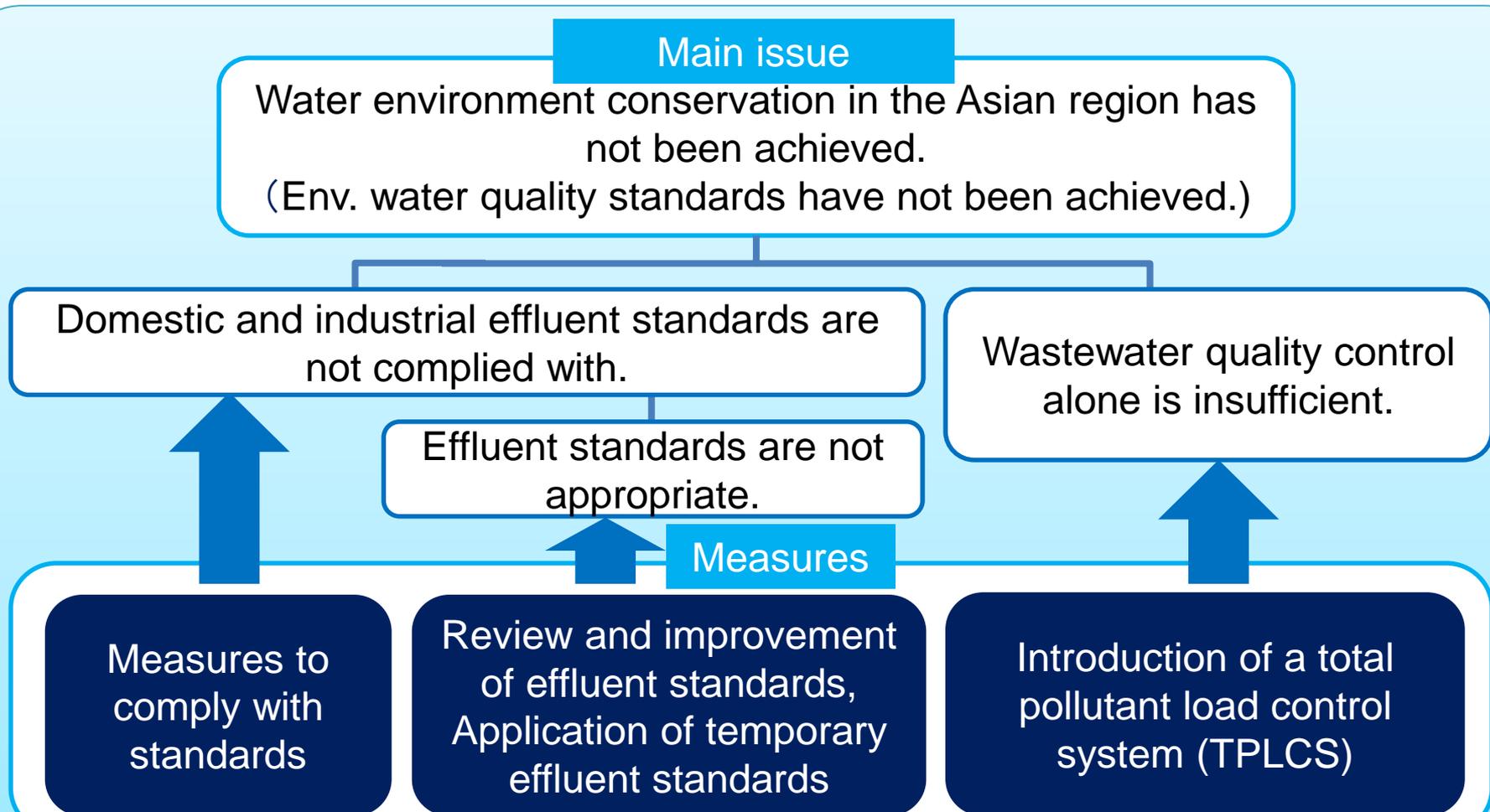
- Although effluent standards are established in all WEPA countries except Myanmar, compliance with the standards is an issue.
- If compliance with the standards is technically difficult, [it is necessary to review the appropriateness of the standards.](#)

Establishment of Effluent Standards in WEPA Countries

	Domestic 	Industrial 
 Cambodia	●	●
 China	●	●
 Indonesia	●	●
 Japan	●	●
 Republic of Korea	●	●
 Lao PDR	●	●
 Malaysia	●	●
 Myanmar	—	—
 Nepal	●	●
 Philippines	●	●
 Sri Lanka	●	●
 Thailand	●	●
 Viet Nam	●	●

Issues and measures based on efforts up to the 3rd Phase

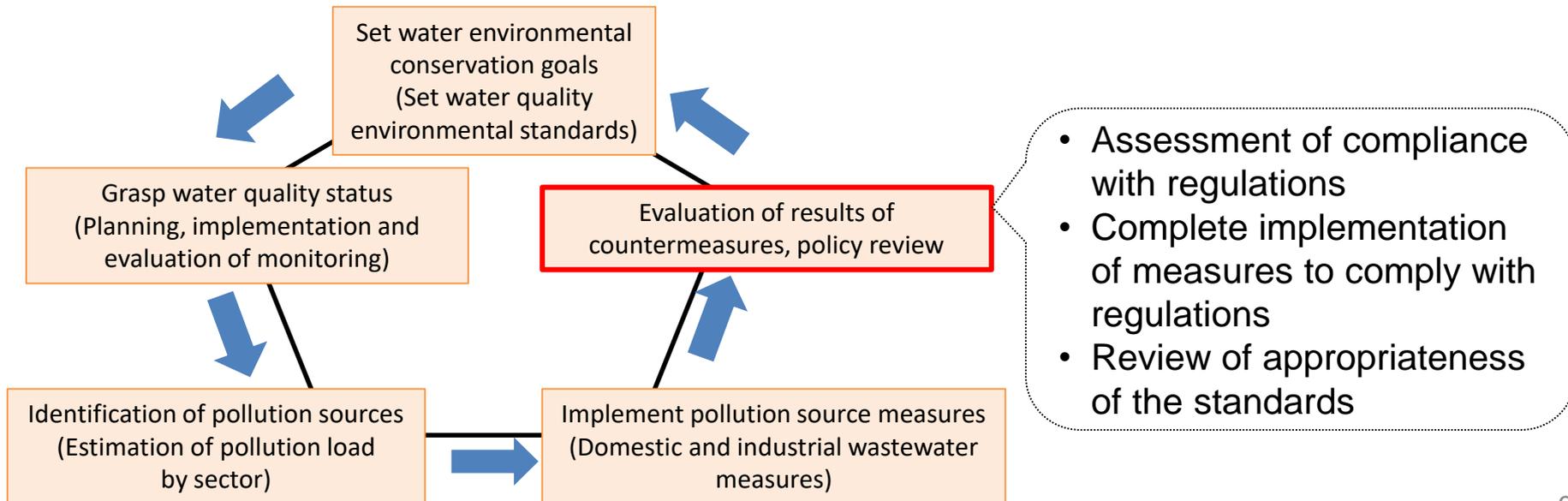
- There are two main reasons why water environment conservation in Asian region has not been achieved - one is that not only the effluent standards are not complied with, and the other is that wastewater quality control alone is insufficient.
- Measures need to be taken according to each factor.



WEPA basic policy in the 4th Phase

The 4th Phase: Steady implementation of problem-solving actions
(Priority issue: Compliance with regulations)

1. Period: from April 2019 to March 2024
2. Purpose: Complete compliance with regulations to achieve water quality environmental standards
3. Basic Policy: Capacity enhancement of government officials to ensure compliance with regulations
→ Establishment of autonomous water environment administration through the following PDCA cycle



Main activities in the 4th Phase

- Targeting both domestic and industrial wastewater, which are the major pollution sources in each country, [share the issues regarding compliance with regulations and the main activities required to comply with them \(see below\)](#) through various meetings and action programs. And then, strengthen the capacity of government officials by supporting efforts made by each country.
- With the cooperation of each country, [advanced guidelines, technologies, and reference case examples are added to the WEPA database and presented to each country](#), so that each country can make independent efforts (assessment of compliance with regulations, complete implementation of measures to comply with regulations, review of appropriateness of the standards, etc.).

Examples of measures required for complete compliance with regulations

- Clarification of roles and authorities of central and local governments
- Complete regulations for businesses (notification, measure and log pollution status of effluent, on-site inspections), penalties, order remedy, administrative directions, etc.
- Appropriate enforcement and operation of the effluent standards
 - Enforcement and application of more stringent effluent standards in cases, where national effluent standards and their scope are insufficient due to natural and social conditions
 - Application of temporary effluent standards when compliance with effluent standards is technically difficult
- Review of appropriateness of existing effluent standards and improvement
- Introduction of TPLC, when conventional water quality control measures through effluent standards alone is insufficient.

Process for finalizing the basic policy in the 4th Phase

January 2020:

- Send the draft basic policy to WEPA partner countries
- Revise the draft basic policy based on comments from WEPA countries



February 2020:

- The basic policy in the 4th Phase will be approved at the WEPA annual meeting.