

The Challenges and Prospects of Nuclear Security Cooperation between China and ASEAN

XU Yao

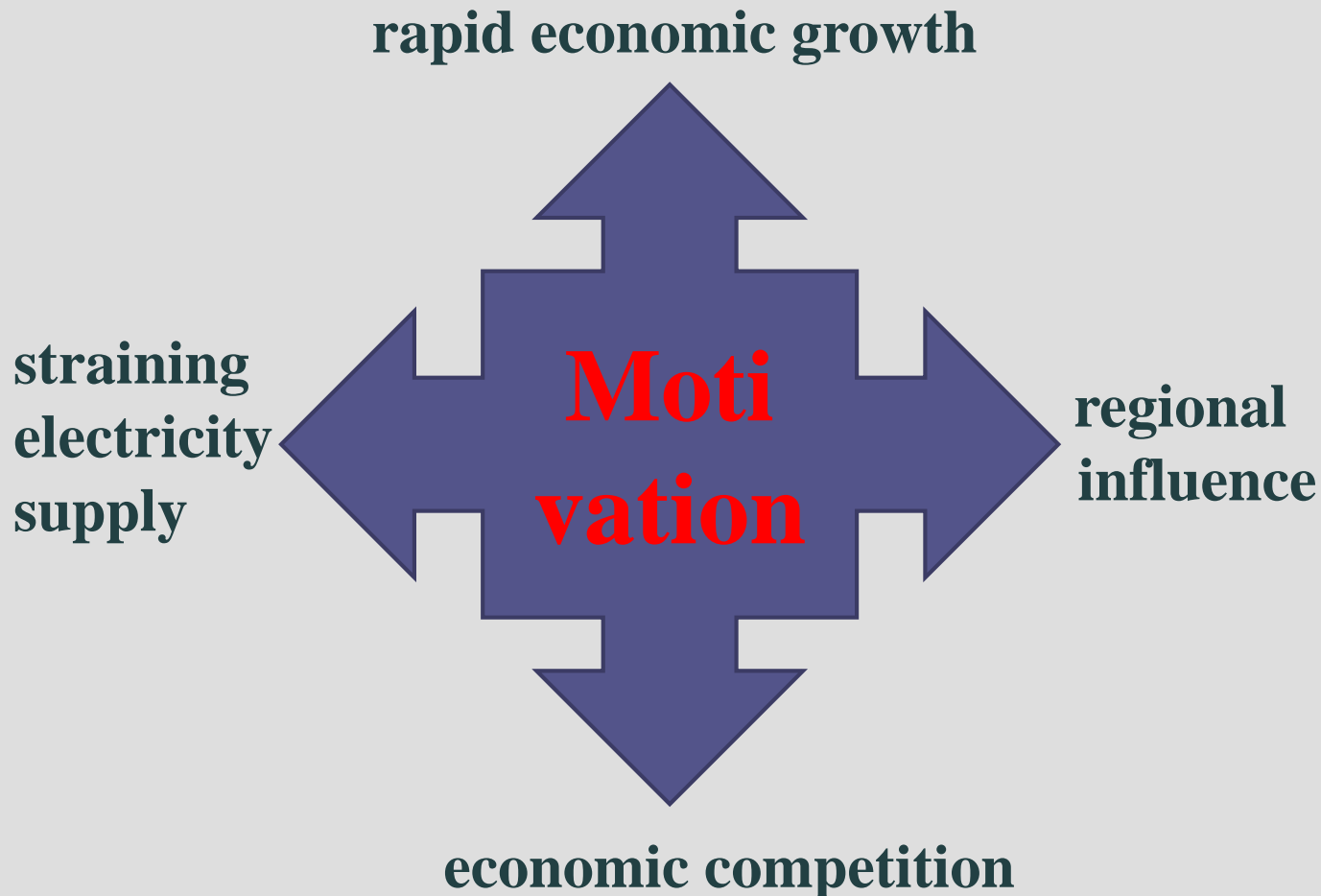
Chinese Academy of Governance

Challenges for Nuclear Security in the Region

Existing Cooperative Mechanisms between China and ASEAN

Prospects for Nuclear Security Cooperation between China and ASEAN

Challenges for Nuclear Security in the Region



Southeast Asia Countries Nuclear Plans

| Country | Proposed Power Reactors (officially announced plans) | Fukushima Impact |
|----------------|--|--|
| Indonesia | 4 units by 2024 (4,200 MW) | no official changes |
| Malaysia | 2 units by 2022 (2,000 MW) | no official changes |
| Thailand | 4 units by 2030 (4,000 MW) | Thai government decided in April 2011 to delay for 3 years start of NPP plan implementation. |
| Vietnam | 6 units by 2025 (6,000 MW) | no official changes |

Key Challenges for Nuclear Security in the Region

High Level of Terrorist Activity

Illicit trafficking in nuclear and other radioactive materials, thefts, losses and other unauthorized activities remains a big threat to the international society.

1,266 incidents reported by 99 countries over the last 12 years, including 18 incidents involving HEU or plutonium trafficking. (IAEA Illicit Nuclear Trafficking Database)

Insufficient Border and Export Controls

A lack of strong border and export controls makes states in the region prime targets for illicit trafficking networks, with trafficking in drugs, arms, and people a serious problem.

The AQ Khan Network

Scarcity of Adequately Trained and Supported Human Resources

Existing Cooperative Mechanisms between China and ASEAN

➤ Cooperation under the Framework of the International Regime

Convention on Nuclear Safety

Convention on the Physical Protection of Nuclear Material

Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

➤ Cooperation under the Framework of the Regional Regime

ASEAN +3 Forum on Nuclear Energy Safety

East Asia Summit

➤ **Cooperation on Countering Nuclear Terrorism**

International Convention for the Suppression of Acts of Nuclear Terrorism

Global Initiative to Combat Nuclear Terrorism

Formal regime to combat nuclear terrorism between China and ASEAN:

China-ASEAN Center to Combat Nuclear Terrorism ?

➤ **Deepen Ties with the Existing Regimes**

Asia-Pacific Safeguards Network

Regional Radiological Security Partnership

➤ **The Regional Nuclear Security Center**

The China-U.S. Center of Excellence on Nuclear Security should become a decent platform to enhance the training cooperation between China and ASEAN.

Joint regional training centers specializing in three distinct subjects, which are border control, security of nuclear materials and facilities, and nuclear safety should get support from it.

➤ **Regional Uranium Enrichment Centre in Asia**

Sensitive facilities (enrichment and reprocessing) should be operated on a multinational basis.

➤ **Bilateral Cooperation between China and the Southeast Asian Countries**

A series of research and development (R&D) projects: launched by the China Atomic Energy Authority (CAEA) after the Fukushima crises, including the development of passive emergency power supply and cooling water systems, development of passive containment heat removal systems, developing hydrogen control devices, measures for the prevention and mitigation of used fuel accidents, and analysing the impact of multiple simultaneous external events and response measures.

Thank you !!