

Infrastructure Preservation: Social and Political Issue

- ✓ People usually do not recognize importance to preserve infrastructure.
- ✓ Accidents tell us a lot: importance of preservation; various cause of accident; and what we should do.



Sasago Tunnel Ceiling Collapse killed 9 persons in Japan in 2012 (Source::MLIT))



Collapse of I-35W Mississippi River Bridge in USA in 2007 killed 13 and injured 145 people. (Source: "Highway Accident Report", Nov.,2008, National Transportation Safety Board)

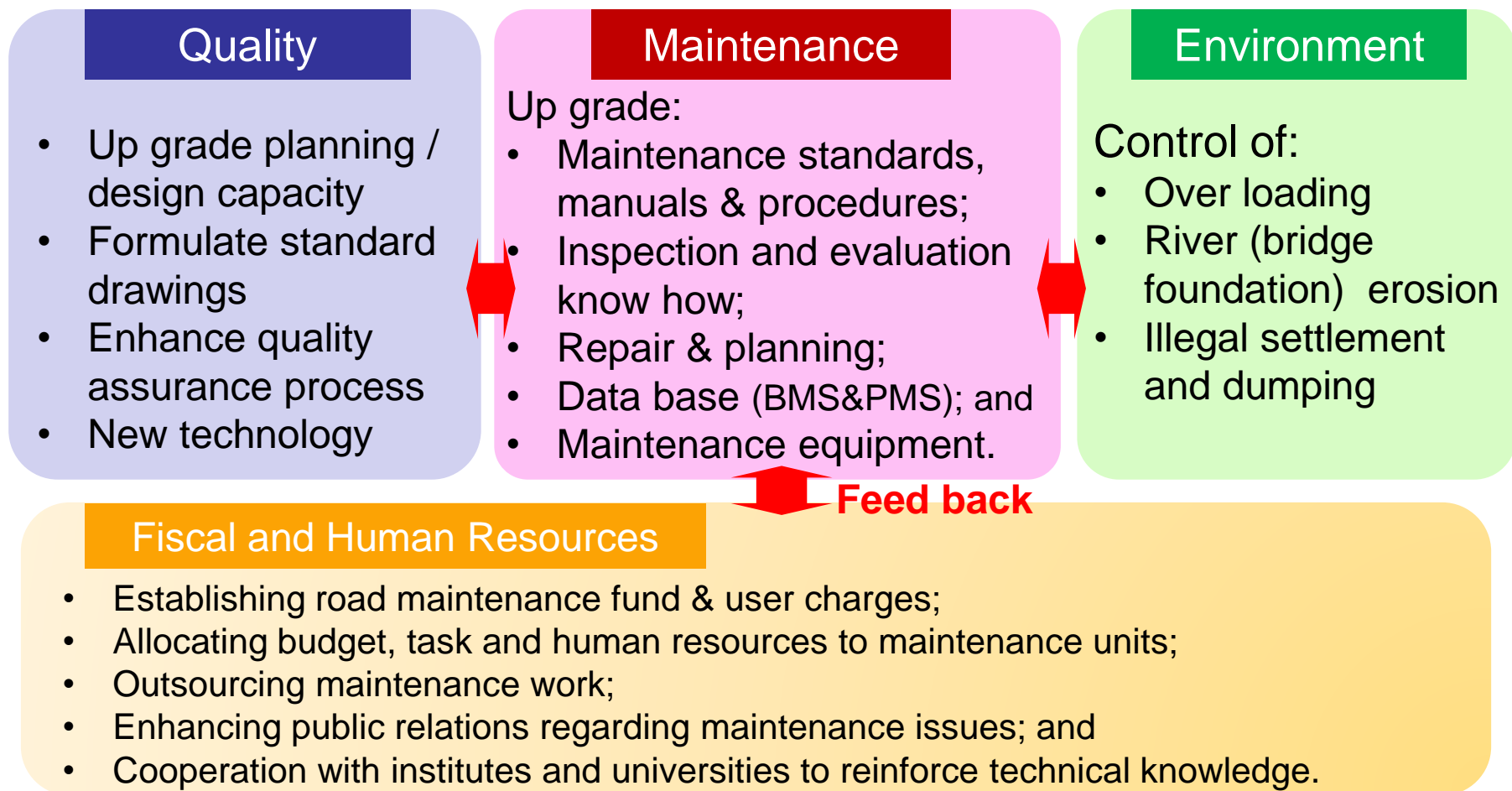


Myaungmya Bridge in Myanmar collapsed in 2018 because of corrosion of suspension cable. (Source: University of Tokyo)



An over loaded truck severely damaged a bridge in Cambodia. (Source: JICA expert team)

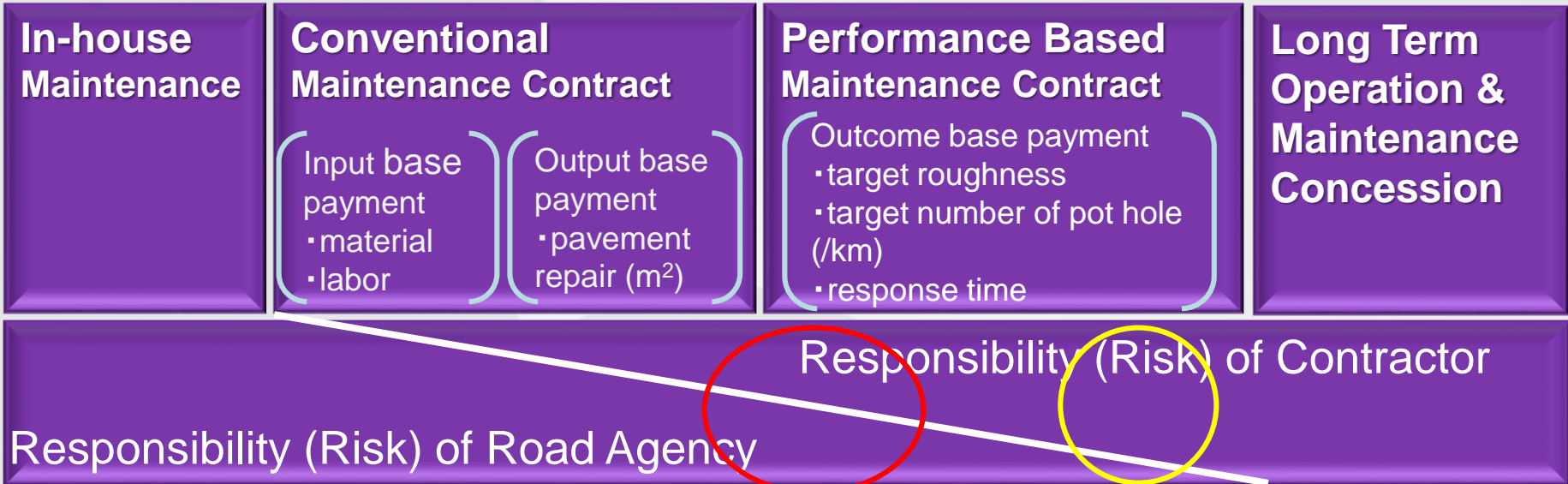
- ✓ Asset management consists of 4 domains. There a lot of things to do.
- ✓ Donor agencies have cooperated for infrastructure asset management in various fields, and should share tasks and knowledge so as to complementarily enhance outcomes of assistances.



Private Sector Participation in Maintenance

1) Performance Based Maintenance Contract

Performance based maintenance contracting (PBMC) is adopted in not a few countries to fully utilize private sector knowledge and properly allocate responsibilities between an owner and a contractor. Many donor agencies including JICA support this scheme.



Ditch cleaning by a PBMC contractor in Kenya

WB is likely to provide loans to fund PBMC with higher responsibility of contractors.

JICA has provided Kenya with TC to introduce nationwide PBMC with medium level of contractors' responsibility to utilize medium sized local contractors.

“Toll road scheme” and “O&M concession” can be effective solution to secure fiscal and human resources.

- ✓ Task allocation between an owner and a concessionaire in emergency case should be clarified in advance. “Due Diligence”, thorough evaluation of infra asset, is indispensable to clarify responsibility in case of infrastructure failure.
- ✓ Mitigation for local inhabitants should be considered in case of imposing toll on a route without detours.

【Ex. Dushanbe-Chanak Road in Tajikistan】

- 358 km long vital section, rehabilitated and improved by donor funds, is now operated and maintained as a toll road by the private concessionaire.
- Maintenance level is better than ordinary national highways.



A toll gate located nearby Dushanbe
(Photo by S. Kawahara)



Well maintained toll road section
(Photo by S. Kawahara)