Cooperative Development of Port & Logistics Infrastructure
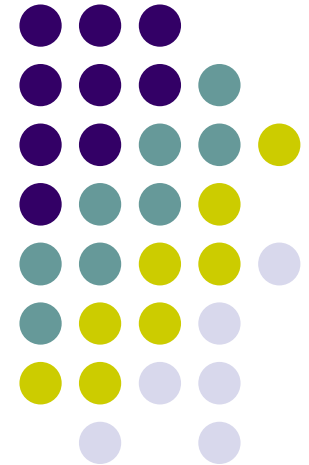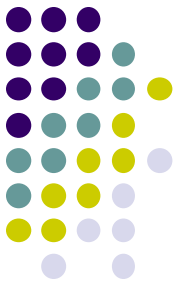
International Port Conference BUSAN 2018

Sustainable Port Development and Government Policy for Enhancement of PPP

2018. 11. 2

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http://english.kmou.ac.kr/english/
http://www.kmou.ac.kr/

Outline

❖ **Analysis of Overseas Development Environment**

❖ **Sustainable Port Development**

❖ **Direction for Overseas Development Cooperation**

❖ **Government Overseas Port Development Policy**

❖ **Summary**

❖ **Analysis of Overseas Development Environment**
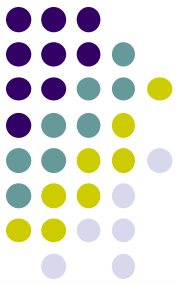
1 **Analysis of International Environment**

● **Starting System for Sustainable Development**

  •*Adopted 2030 UN Agenda for Sustainable Development*
  •*17 SDGs Sustainable Development Goals with 169 targets*
  Check risks and opportunities

● **Expansion of Development Level & Dimension**

  •*Existing UN MDGs UN Millennium Development Goals: Social Development*
  •*UN SDGs : Social Development + Economy Development*
  + Preservation of Environment

  •*New Tools & Issues → IOT, Big Data, Interconnectivity-Block Chain*
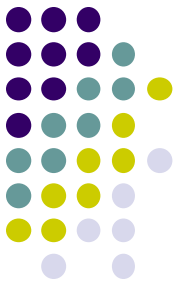
● **Various Development Funds & Resources**

  •*Increased Demand for Development Funds : Developing countries,*
  Climate change, Energy deficit
  •*Importance & function of ODA, inducing private participation*
  •*Assistance effectiveness → Development effectiveness (PPP)*

# ❖ **Analysis of Overseas Development Environment**

2 **Analysis of Domestic Environment**

● **Diversified Participation Pattern for ODA for Port & Logistic Projects**

- *Private sector : Increasing NGO Assistance, Private approach to market of developing country with social duty*
- *Dominant trend of increase ODA participation both CG and LG*

● **Arrived Limit to ODA Resources**

- *Stagnation of Economy growth ratio*
- *Limit on National & Local Finance (-)*
- *Pressure from Welfare Finance : support for vulnerable social group & youth employment*

● **Request on Effectiveness & Transparency**

- *Stagnant Public Support on Increase of ODA*
- *Strong interest on ODA and Domestic financial pressure : Strengthen Effectiveness & Transparency of ODA*

❖ **Sustainable Port Development**
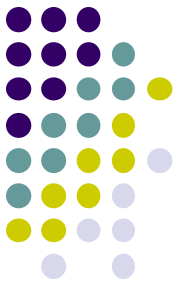
1 **What is a Sustainable Development?**

Wrong!→ *Development only considers the needs of present generations without compromising the ability of future generations to meet their own needs*

Development = Improve human's life
Economic growth linked with income +
Enhance Social benefits (health, education, environment)

Leave possibility of development for the next generation

*Find complementary measures considering short-long term impacts*

❖ **Sustainable Port Development**
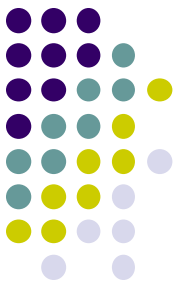
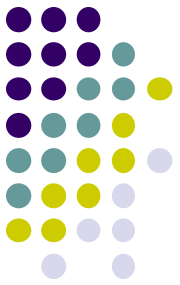**2** **Environmental Impacts due to Port Development**

➢ **Environmental Factors** **to be considered** **in relation to Port Development are categorized into 9 groups**

1) Water Quality

2) Coastal Hydrology

3) Bottom Contamination

4) Marine and Coastal Ecology

5) Air Quality

6) Noise and Vibration

7) Waste Management

8) Visual Quality

9) Socio-Cultural Impacts

AMP
eco
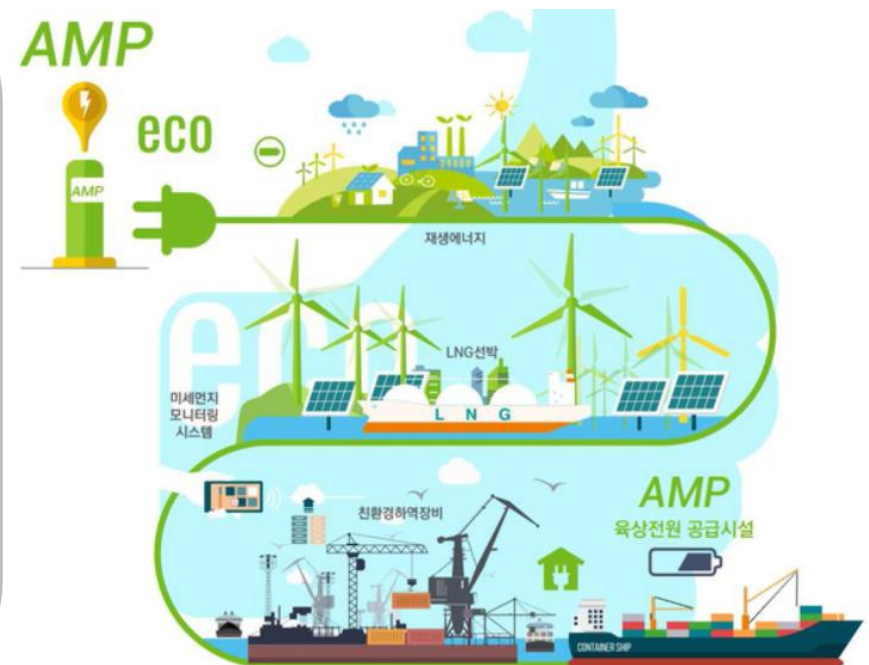
Source: KMI

❖ Sustainable Port Development

2 Environmental Impacts due to Port Development

War against Pollution

공해와의 전쟁
친환경선박 전성시대

나는 못해!
No!!

Annex VI of MARPOL

- 2020 IMO regulations to reduce air pollution from maritime sector, port & shipping industries (MARPOL ANNEX VI - 73rd MEPC)

❖ Sustainable Port Development
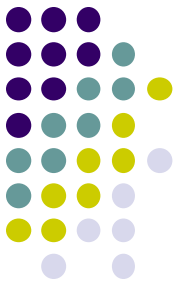
3 Environmentally Sound Port Development

➤ **Problem of Environment caused by Port Development**

● *Development in terms of cargo handling capability (meet demand)*

- *insufficient formation of integral port region/port-urban: no harmony*

- *restricted space : guard, surveillance purpose*

  / lack of understanding on waterfront

● *Trend for advanced port plan*

- *logistics + ocean cultural region*

  remodel port structure as integrated space

- *near port (relative industrial region, distribution region)*

  / split port (resident green region, core urban region)

❖ Direction for Overseas Development Cooperation
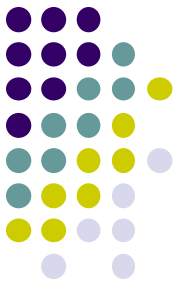
1 Strengthening Partnership

➢ **Strengthening Partnership for Port Construction Project**

- *Setup PPP (Public-Private Partnership)* *(eg.PPP project in India)*
  - *connect private sector and government of developing country*
  - *activate partnership with **high quality & valued private sector***

- *Participate to port development project & plan and coordinate*
  - *strong relationship to maximize the end result*
  - *assist on port master plan, feasibility & sustainability study, construction project management & operation*

- *Leave chances to domestic construction & engineering companies*
 - *government involved in the first stage of project activation*

# ❖ **Direction for Overseas Development Cooperation**
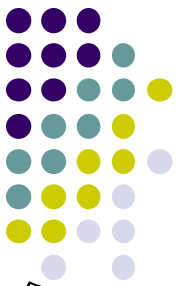
2 Risk and Outcome Management

➢ Management Convergence

- *Enhancing quality of feasibility study*
  - *investigate project background*
  - *figure out local economy & social impact*
  - *check sustainability of policy & finance procurement*
  - *risk analysis – SWOT, contingency plan*

- *Implementation of trustworthy partner for overseas PPP business*
  - *link feasibility study with the main project*
  - *information sharing platform for port & logistic infrastructure development*

- *Control of project bottlenecks*
  - *break down barriers*
  - *simplify permission & administrative procedures*
  - *support working level consultation & training*
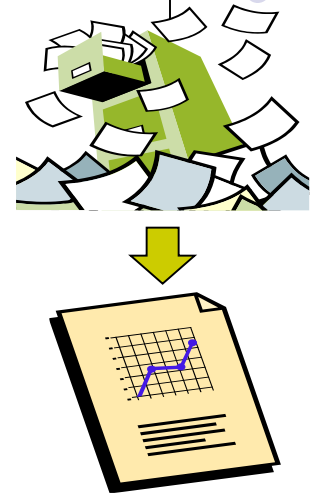
❖ Direction for Overseas Development Cooperation
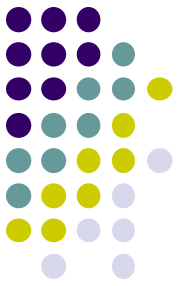
3 Responsibility

➢ Responsibility and Collaboration on Project

- *Social responsibility*
  - *- became a business imperative, not an optional*
  - *- see it as an opportunity*

Social Responsibility

- *Operation of Development Action Program (DAP)*
  - *- trade off between economic value and social-environmental value*
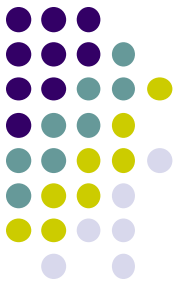   - *Remind sustainable development !*
  - *- win-win effect by business matching & linking BPP*
    - *Business Partnership with Private sector*

- *Collaborate with potential global partners*
  - *- help to prepare financing & legislation (eg,PPP law)*
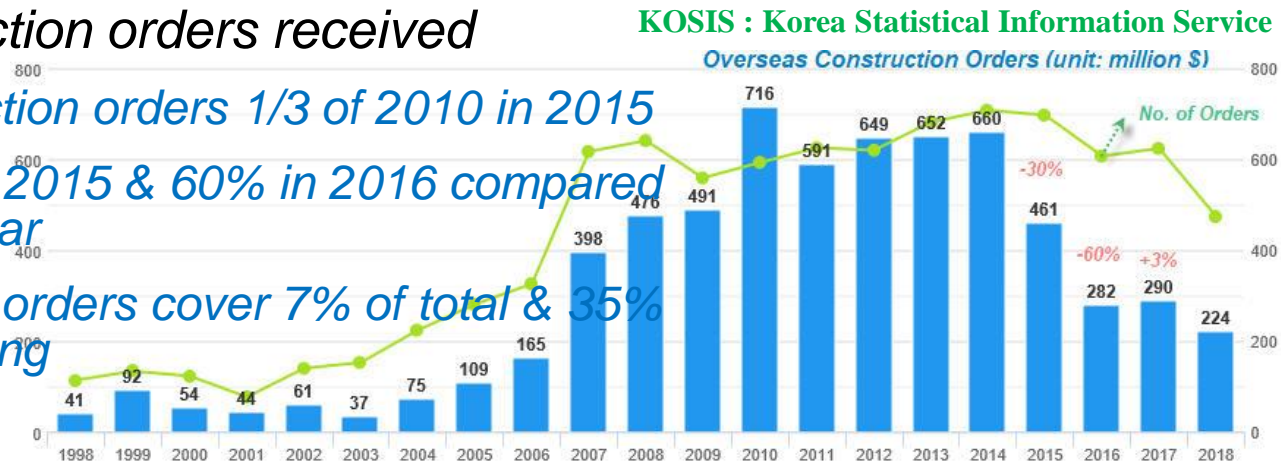
❖ **Government Overseas Port Development Policy**

1 **Trend of Port Construction Market**

➤ **Domestic**

- *Value of construction orders received*

  - *reduced construction orders 1/3 of 2010 in 2015*

  - *30% reduction in 2015 & 60% in 2016 compared with pervious year*

  - *port construction orders cover 7% of total & 35% of civil engineering*
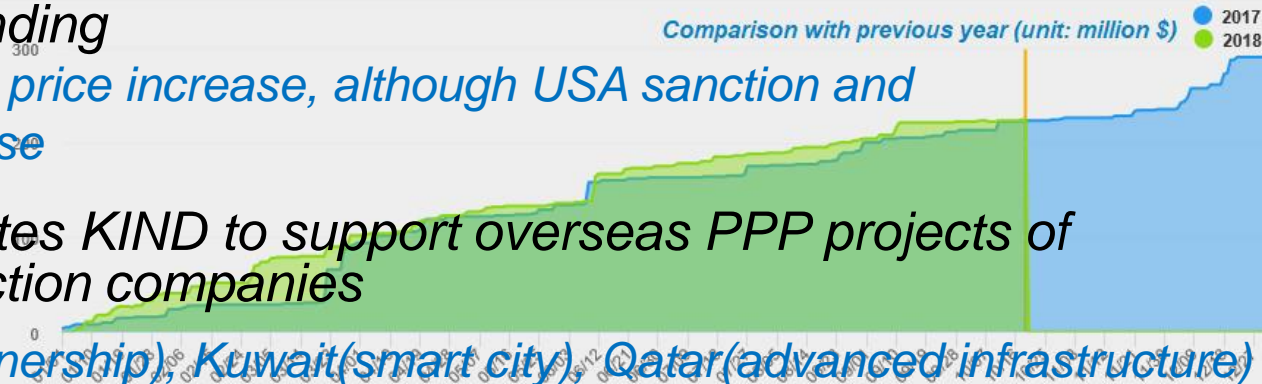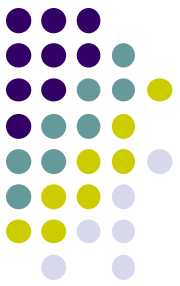
➤ **Overseas**

- *ME order is expanding*

  - *with the help of oil price increase, although USA sanction and base rate increase*

- *Government initiates KIND to support overseas PPP projects of domestic construction companies*

  - *UAE(strategic partnership), Kuwait(smart city), Qatar(advanced infrastructure)*

KOSIS : Korea Statistical Information Service

Overseas Construction Orders (unit: million $)

| 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| 41 | 92 | 54 | 44 | 61 | 37 | 75 | 109 | 165 | 398 | 476 | 491 | 716 | 591 | 649 | 652 | 660 | 461 | 282 | 290 | 224 |

Comparison with previous year (unit: million $) 2017 2018

# ❖ Government Overseas Port Development Policy

2 Status of Cooperative Overseas Port Development

- *Government started cooperative overseas port development project since 2008 but none of overseas expansion through private investment business*

Initial Needs - Project Management - (FS-Final Design-Supply-Construction) - Trial&Monitoring - Operation&Management   (All in one Package!!)

Background	▪ Shrink domestic port construction market ▪ Necessity of expansion to overseas market ▪ Discover new growth engine for port industry	Status	▪ '08~'18 : 29 countries, 30 projects Request of country concerned 4 International cooperation 2 Overseas port construction coordination 3 Government proposal 2 Private request 1
Contents	▪ Free support for port master plan and FS ▪ Design support fit for environment of country concerned ▪ Preparedness for support of overseas marketing and financing of private sector ▪ Management of port development and operation training program for both junior and senior governmental officials	Problems	▪ Drop of reliability for project cost estimation due to difficulties of getting field & ground survey data ▪ Different opinions from port planners of countries ▪ Processing international bidding after overseas cooperative project ▪ Uncertain will of client government for carrying forward the port project (lack of budget) ▪ No reflection on national port development policy ▪ Low interest due to deficient reliability on project outcome ▪ Absence of PPP law in country concerned

❖ **Government Overseas Port Development Policy**
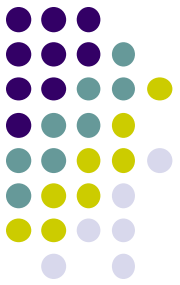
3 **Benchmarking**

➢ **Trends and Complementary measures**

• *Eliminate overlapped mission and over competition*

  - *looking for integration of construction business, financial institutions, and coordination of function*

  - *strengthening business ability for marketing, prospective development, and management of leading customer*

  - *setup outcome indicator & feedback performance measurement of construction projects*

    Value of construction orders, consultation, & satisfaction

• *Complement of our government*

  - *Overseas Construction Promotion Act → KIND*

  - *Organizing integrated coordinator and lending weight & operating IDP*

IBRD
ADB
AIIB
IDB
MDB

KIND
Korea Overseas Infrastructure & Urban Development Corporation

한국수출입은행
EDCF

해외건설협회
KOICA

KSure
한국무역보험공사

KOPIA
한국플랜트산업협회

KDB산업은행

KOSHIPA
한국조선해양플랜트협회

CG 건설공제조합
Construction Guarantee

SGI서울보증
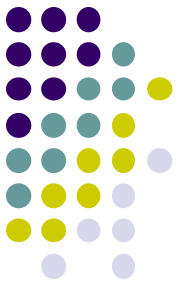
❖ Government Overseas Port Development Policy

4 Competitiveness for Driving Development Project

Financing Competitiveness
- longer repayment period & low interest from the point of recipient country
- fund scale able to drive big project
- government strategy & contents for financing support

Understanding Local Standard & Practice
- understanding nation's institution might be bottleneck to driving port infrastructure project
- competitiveness of construction cost understanding execution of construction environment & market stability, and quality standards

Optimum Construction Cost Estimation
- proper estimation of construction cost at the stage of FS
- participation of construction company as port developer & investor to hedge project risk
- project proposition with a package of management & operation knowhow

❖ Summary
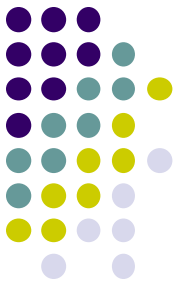
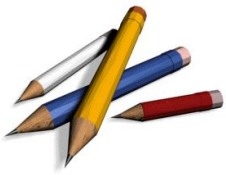> ## *Overseas Port Development Environment*

- *Sustainable development & PPP project assistance*
- *Faces growth limit in overseas construction market*
- *Chance with world class technology and experience for port project*
  - engineering, construction, management, and operation

> ## *Sustainable Port Development*

- *Environmentally sound development*
- *Find complementary measures considering short-long term impacts*

> ## *Government Overseas Port Development Policy*

- *Strengthening partnership and responsibility for port project*
- *Setup complementary measures for collaboration*
- *Convergence of risk and performance management → opportunity*
- *Understand local standard & share management-operation knowhow*
- *Estimate optimum construction cost together with public-private participation*

Cooperative Development of Port & Logistics Infrastructure