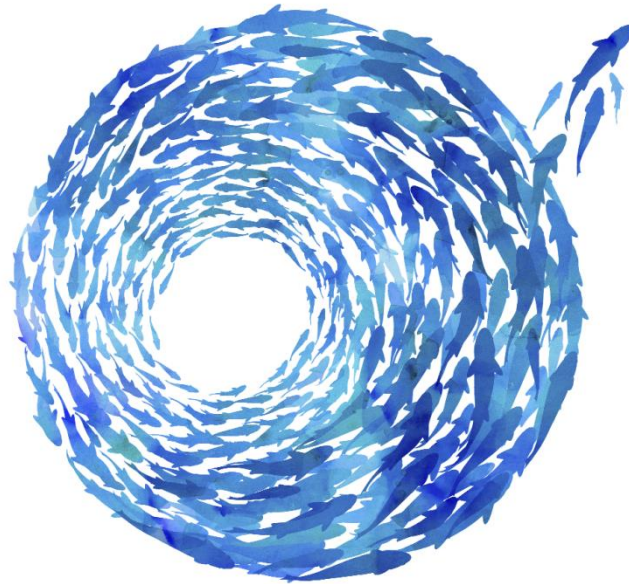




Fishery Management In Korea

- Transition from input controls to output controls -



Ilhwan Cho
Director / Fisheries Resource Policy Division
Ministry of Oceans and Fisheries

Contents

Current Status

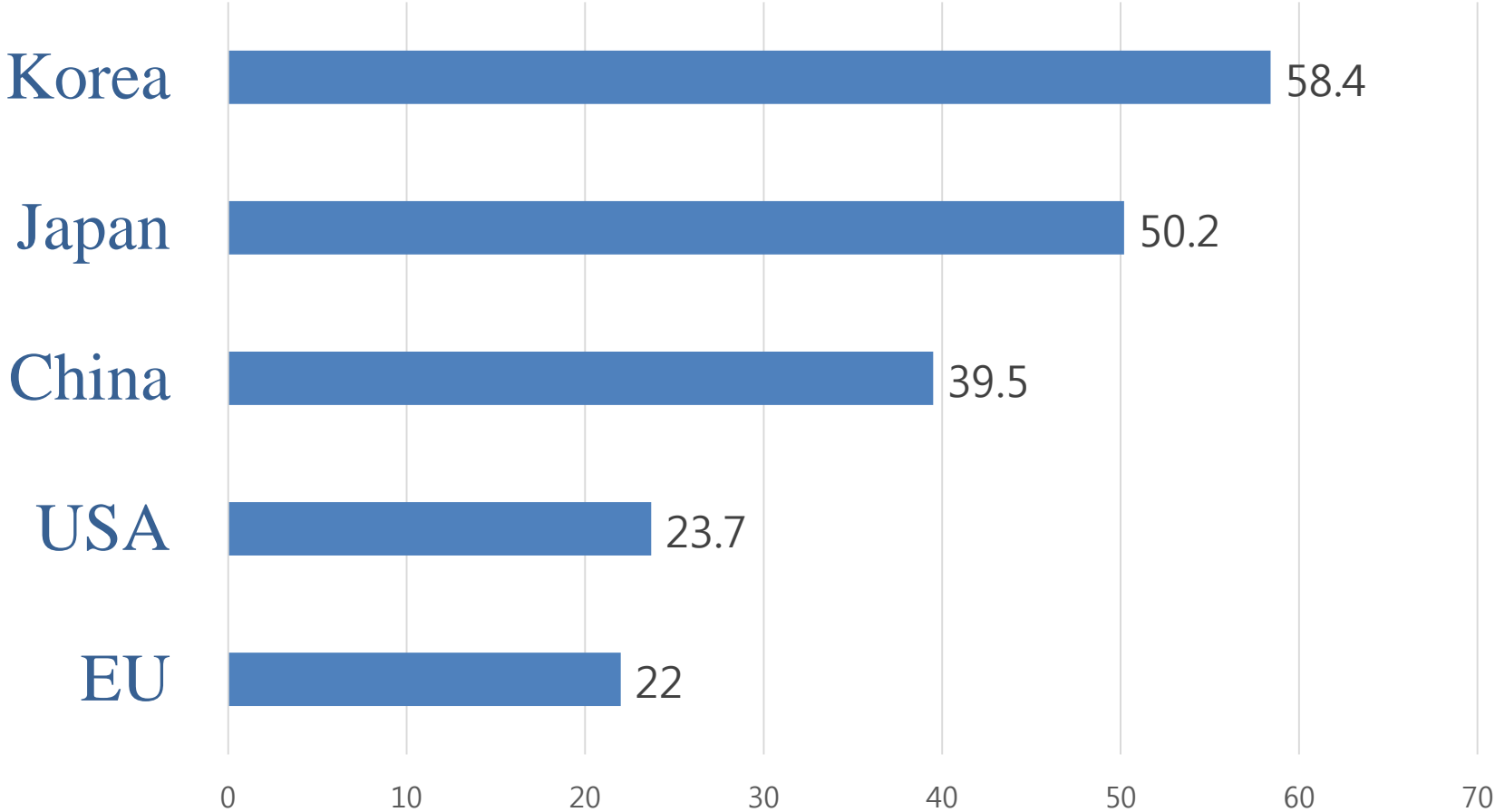
Challenges

The Way Forward

CURRENT STATUS

58.4

CONSUMPTION



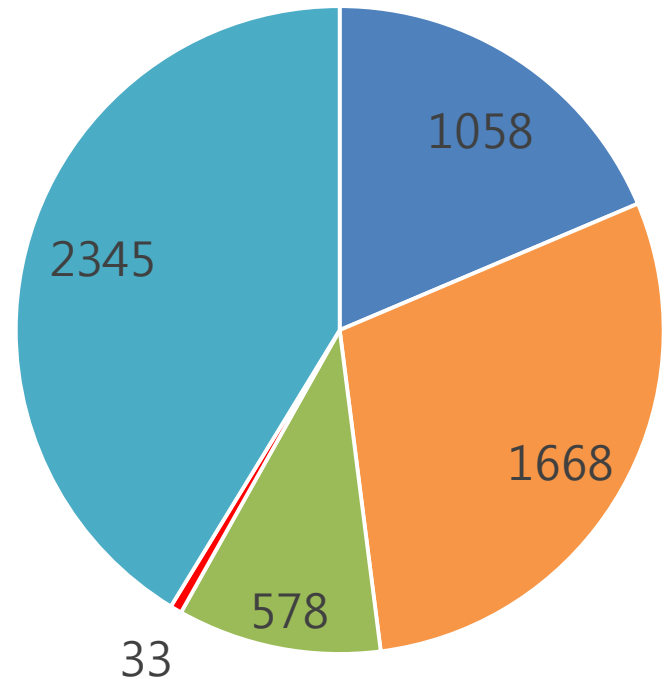
* SOURCE: FAO, 2013-2015 average

COMSUMPTION



SUPPLY & DEMAND (2015)

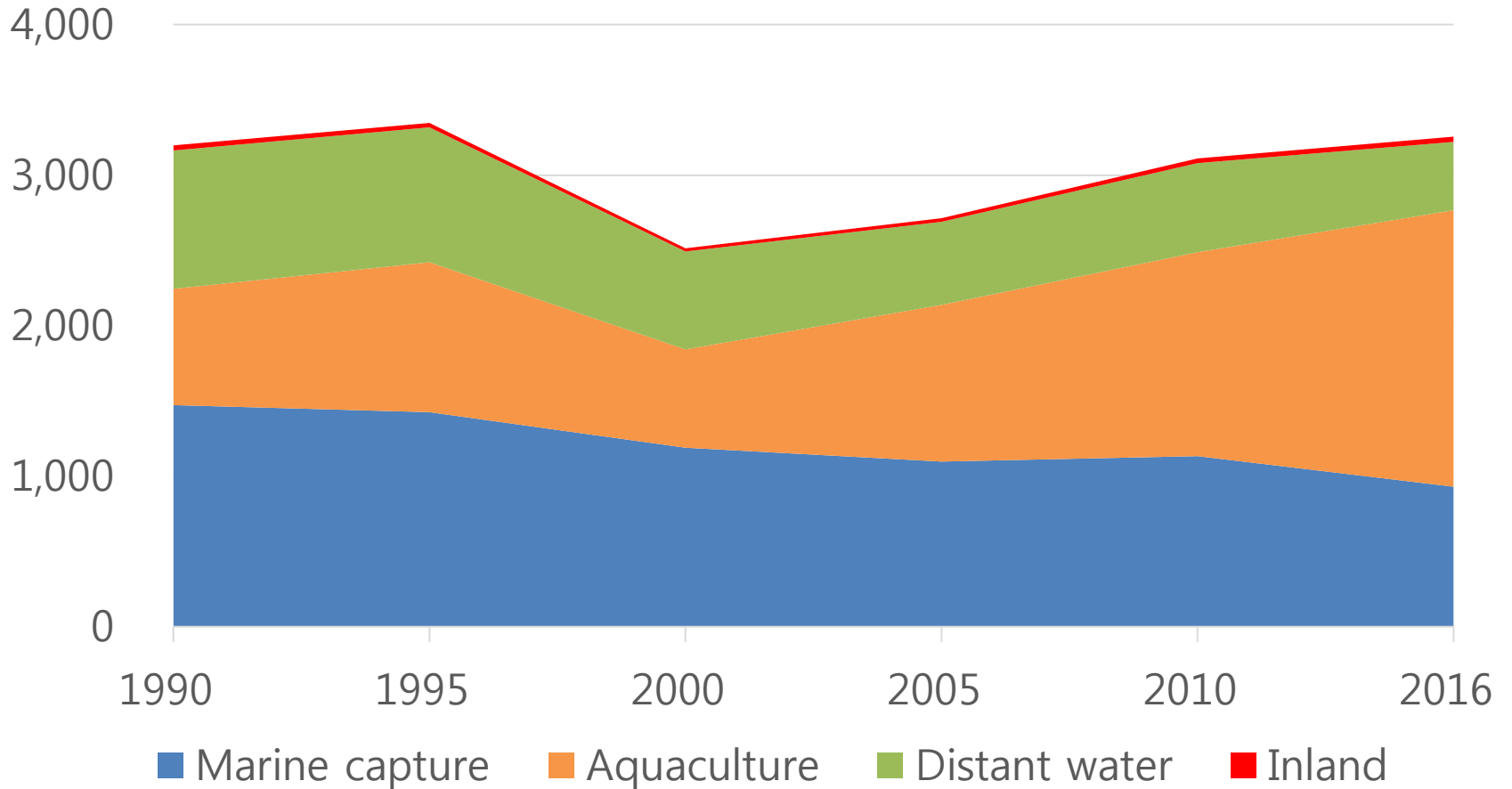
- Demand in 2015: 4,660,000 ton
- Production: 3,340,000 ton
- Import: 2,345,000 ton
- Export: 985,000 ton



- Marine capture
- Aquaculture
- Distant water
- Inland
- Import

* UNIT: 1,000 M/T

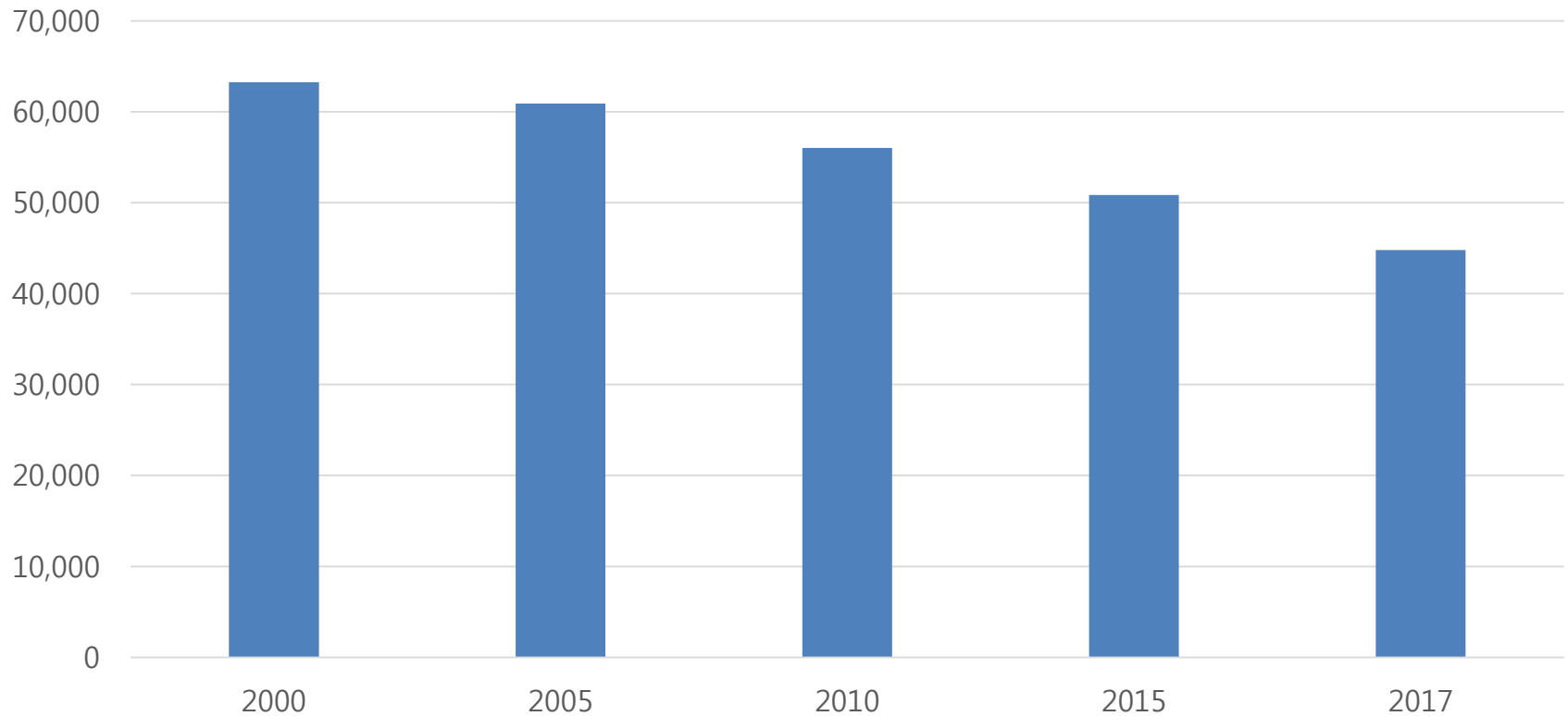
SUPPLY & DEMAND



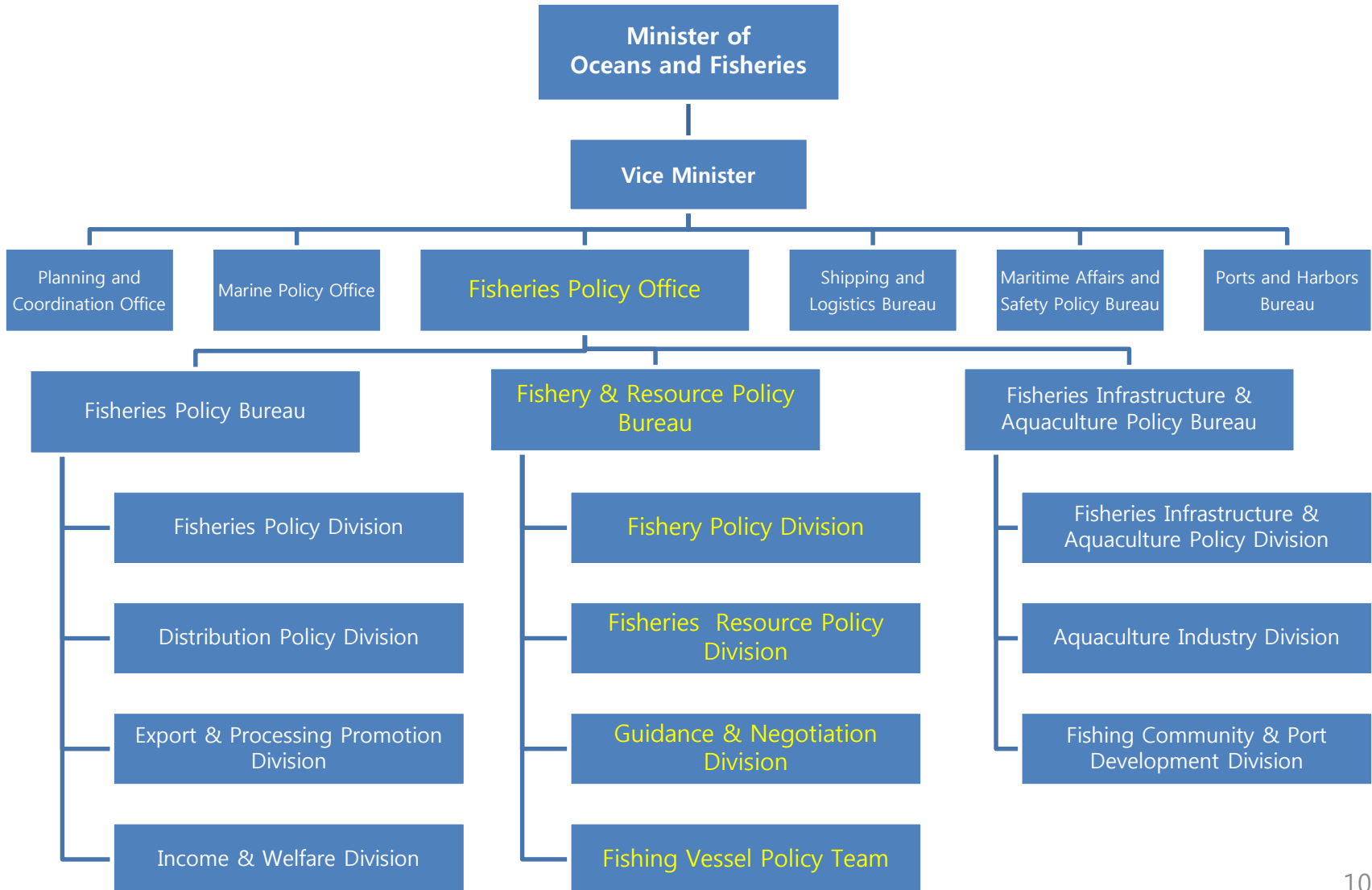
* UNIT: 1,000 M/T

FISHING VESSELS

■ 63,268(2000) ⇒ 44,782(2017) / △ 30%



ADMINISTRATIVE SYSTEM



ADMINISTRATIVE SYSTEM



LEGAL SYSTEM

1. Fisheries Act

- Defines 44 types of marine capture fishery
 - 21 types of off-shore fishery
 - 8 types of coastal fishery
 - 15 types of fixed net(3 licenses, 12 permits)
- Number of licenses and permits
- Limit on fishing vessels(size, engine power)
- Limit on fishing gears(mesh size, number)
- Limit on fishing grounds(time, gear type)
- Limit on fishing seasons
- Limit on target species

LEGAL SYSTEM

2. Fisheries Resource Management Act

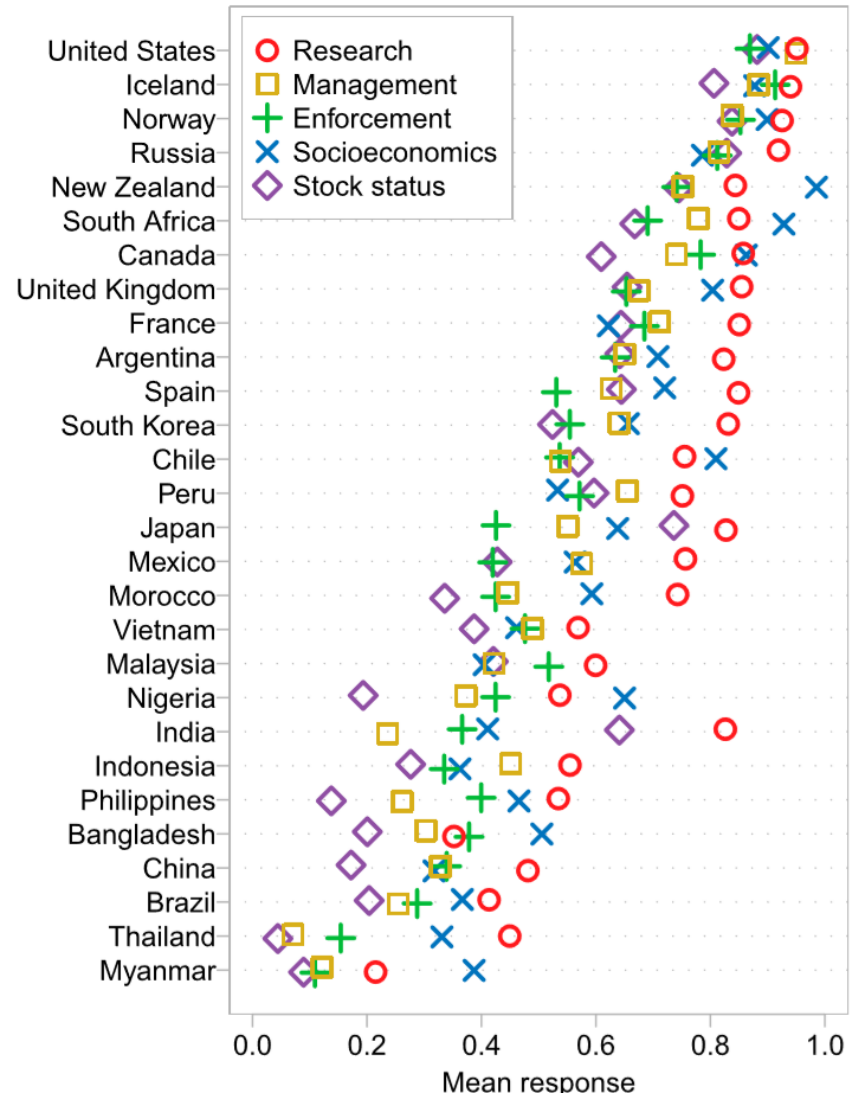
- Fisheries resources survey
- Minimum catch size(40 species)
- Closed season(41 species)
- TAC scheme
- Fish stock restoration & improvement
- Self-regulated fishery
- Fishery Resources Protected Areas

TAC

- 1999: 4 species
- 2018: 11 species(mackerel, jack mackerel, blue crab, snow crab, red snow crab, sandfish, skate ray, squid, top shell, clam, pen shell)
- 25% of marine capture production
- Mostly off-shore fishing vessels / 1,300 vessels

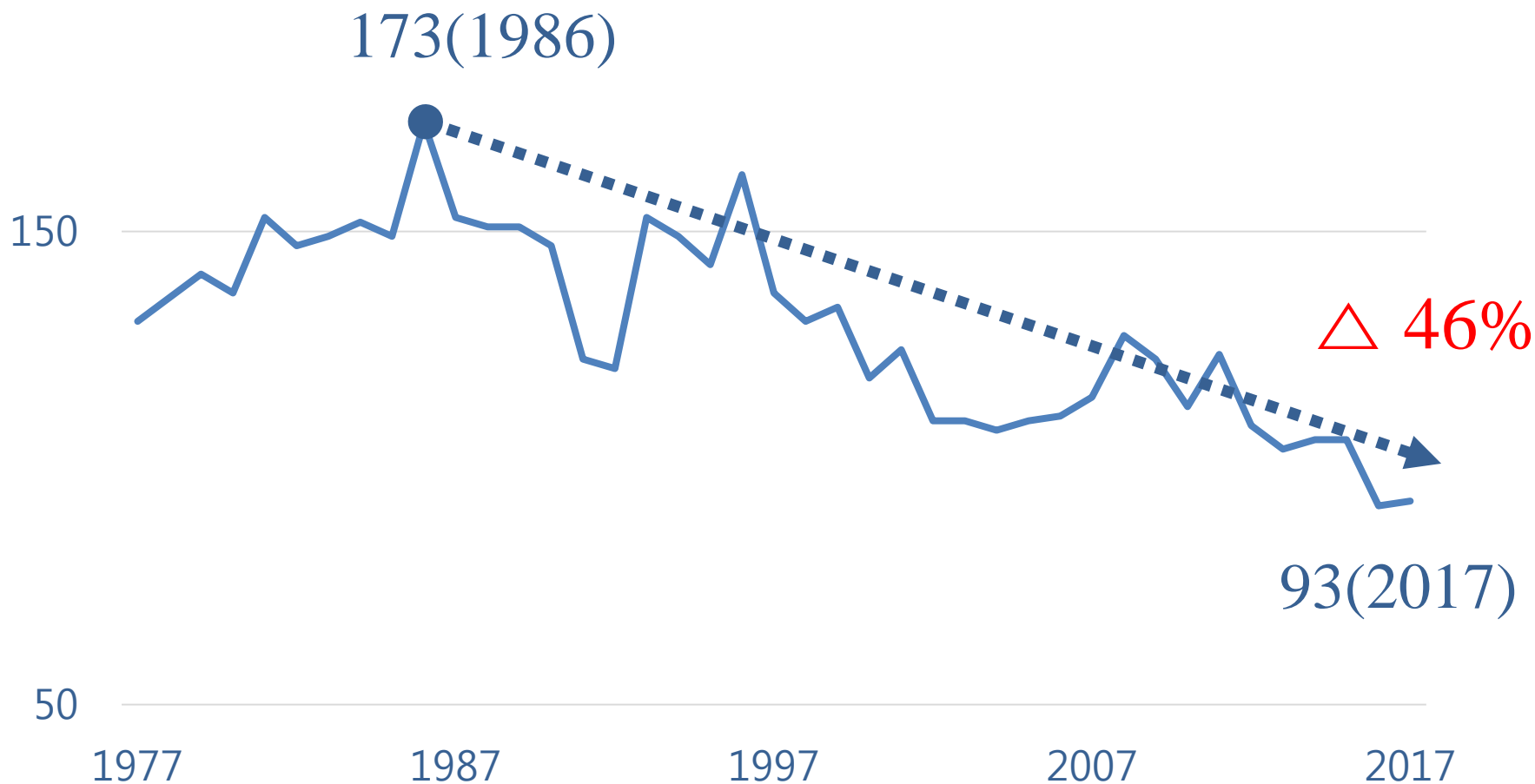
LEVEL OF MANAGEMENT

- Input C. – Output C.
- Fisheries Management Index(2017)
- Korea ranked as 12th among 28 major fishing nations.



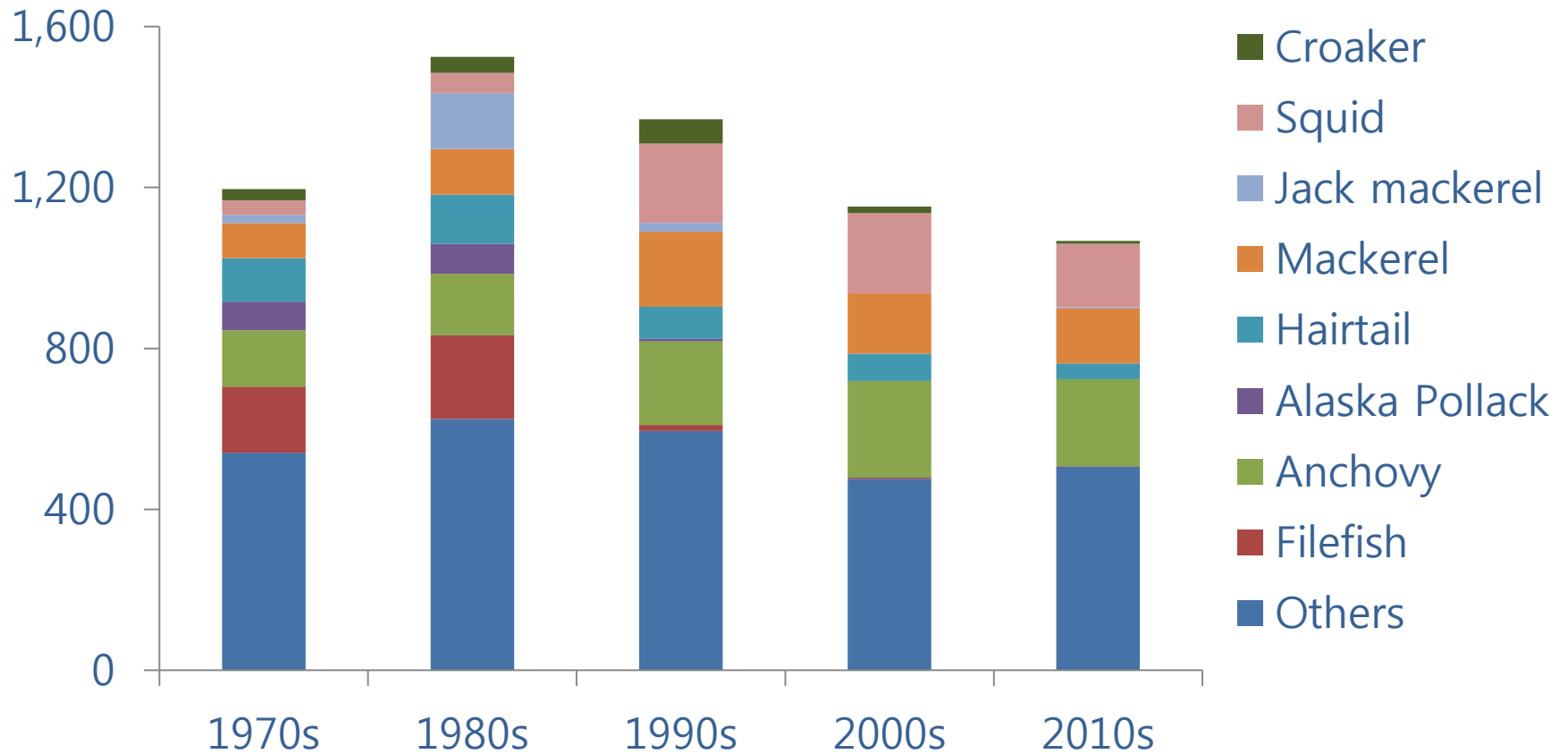
CHALLENGES

REDUCTION IN MARINE CATCH



* UNIT: 10,000 M/T

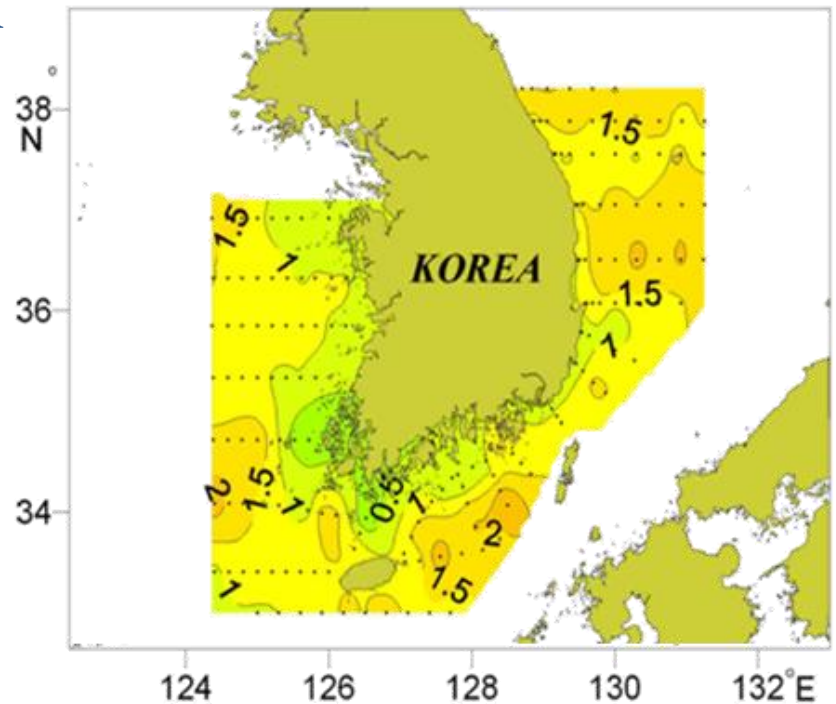
DEMINISHING DIVERSITY



* UNIT: 1,000 M/T

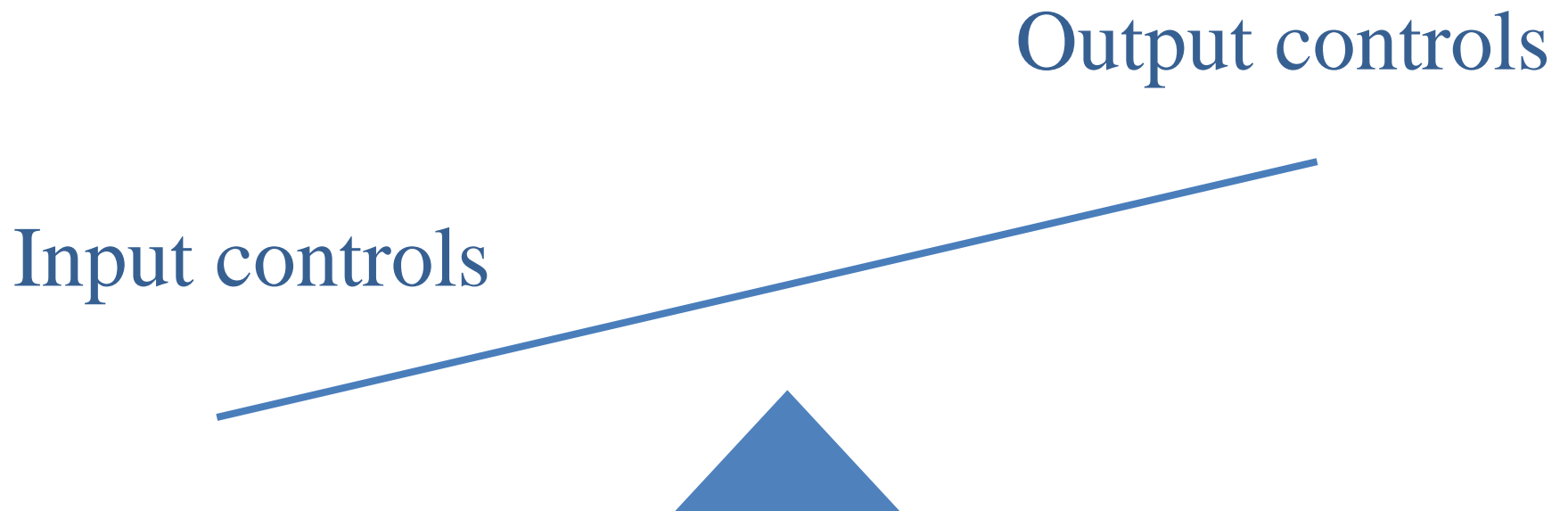
GLOBAL WARMING

- Water temperature has risen 1.1°C during last 40 years
- 3 times the world average
- Fishing grounds: move north
- Alaska pollack: disappear
- Tuna: appear
- Squid: spread



THE WAY FORWARD

NEED FOR TRANSITION



FISHERIES RESOURCES SURVEY

- Fisheries Resource Research Center(2017)
- 4 new research vessels dedicated to resources survey
- 45 species \Rightarrow 80 species(2026)
- Ecosystem-Based Fisheries Resources Assessment and Management System

TAC

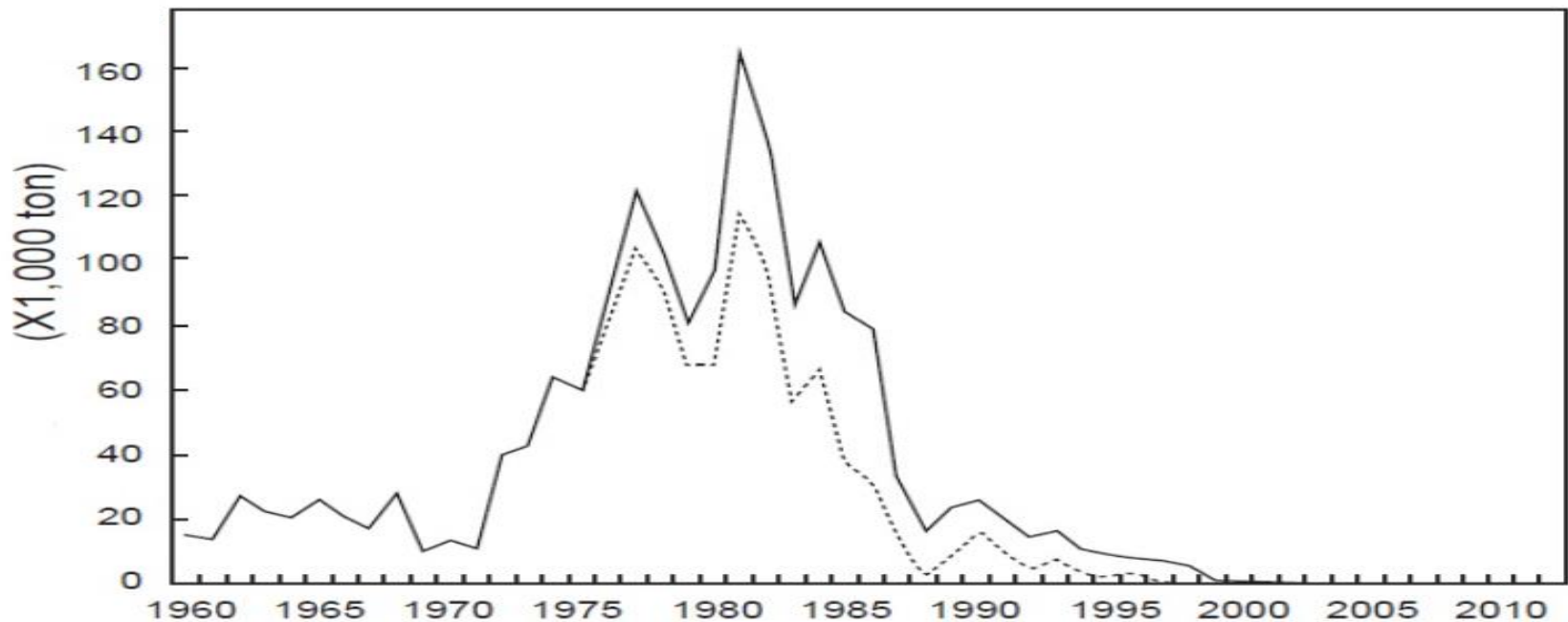
- Hairtail, yellow croaker, anchovy...
- 25% \Rightarrow 50%(2022)
- TAC monitoring staff: 85 \Rightarrow 250(2022)
- Electronic Catch Reporting System
- Individual Transferrable Quota?
- Landing obligations?

SEASONAL CLOSURE

- New in 2019 / Pilot project
- 1 month mackerel fishing ban +
2 months voluntary closure by large purse seine =
3 months recovery period for mackerel stock
- Protect spawners & juveniles
- Expand to other species...

RESTORATION OF THE DEPLETED STOCK

- Alaska pollack: global warming + overfishing of juveniles
- Release more than 1 million juveniles every year
- Year-round fishing ban on Alaska pollack from next year



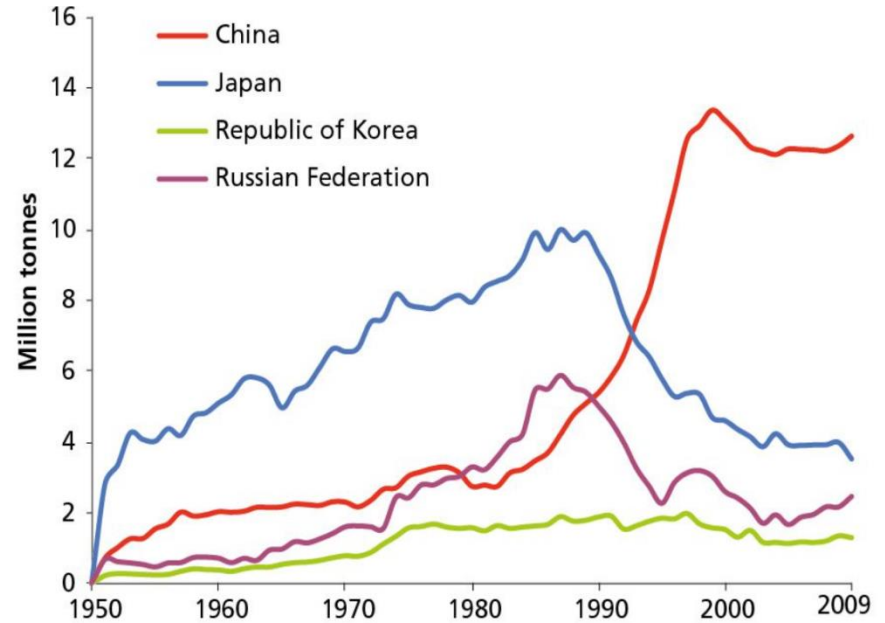
SEA FORESTS RESTORATION

- Respond to sea desertification problem
- 15,000ha of artificial sea forests until 2017
- 39,000ha of additional seas forests until 2030
- Spawning grounds for filefish, octopus, snow crab





REGIONAL CORPORATION



- Fishing Area 61: the most productive in the world
- Occupy about 22% of world marine capture
- China(#1), Russia(#5), Japan(#7), Korea(#18)

The End

