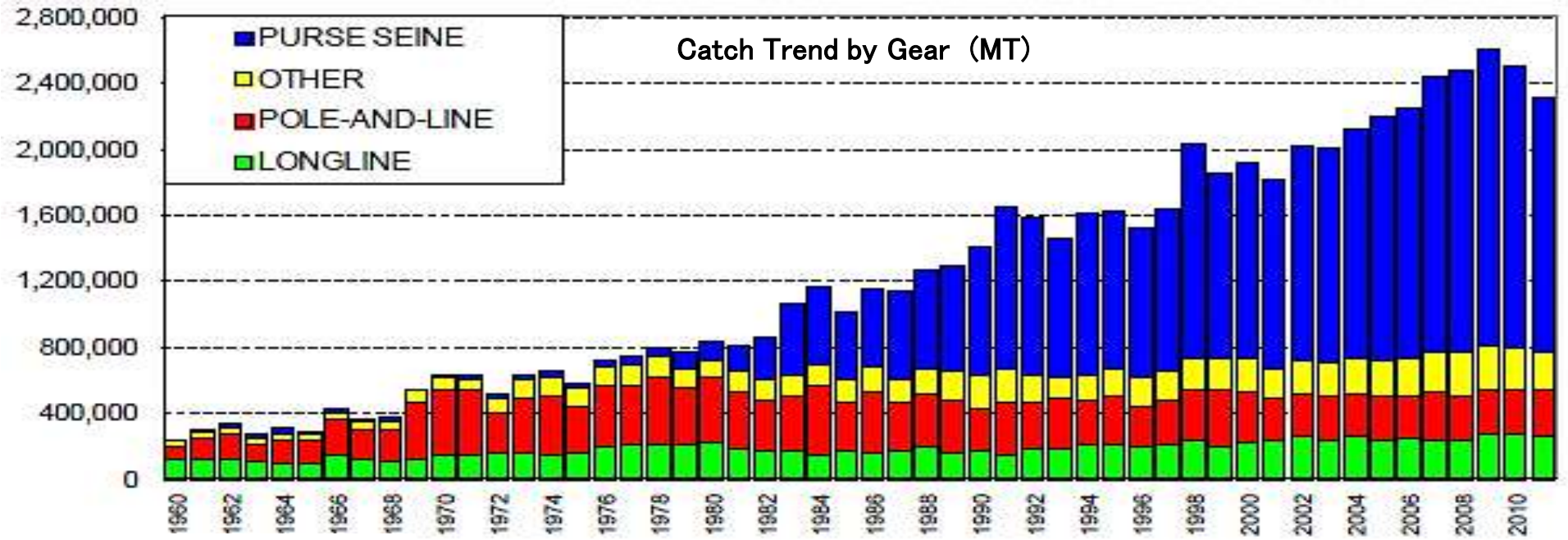
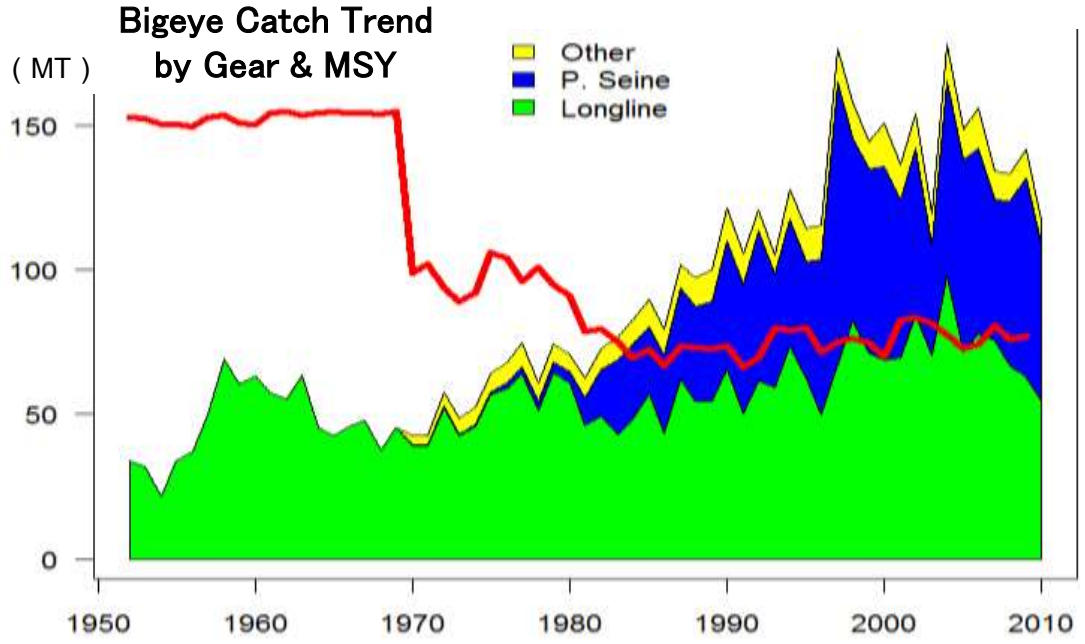
# Struggles of Japanese Small – Middle Scale Longline Fisheries in Last 30 years

# Catch Trend by Gear in WCPO




WCPFC YB 2011




- Tuna Catch in WCPO has increased significantly
- This increase is attributed to PS catch increase starting in 1980's.
- Bigeye Catch increase has shown a similar trend.
- **Such increase masked hardship JPN small- medium LLs face.**

WCPFC SC7 report

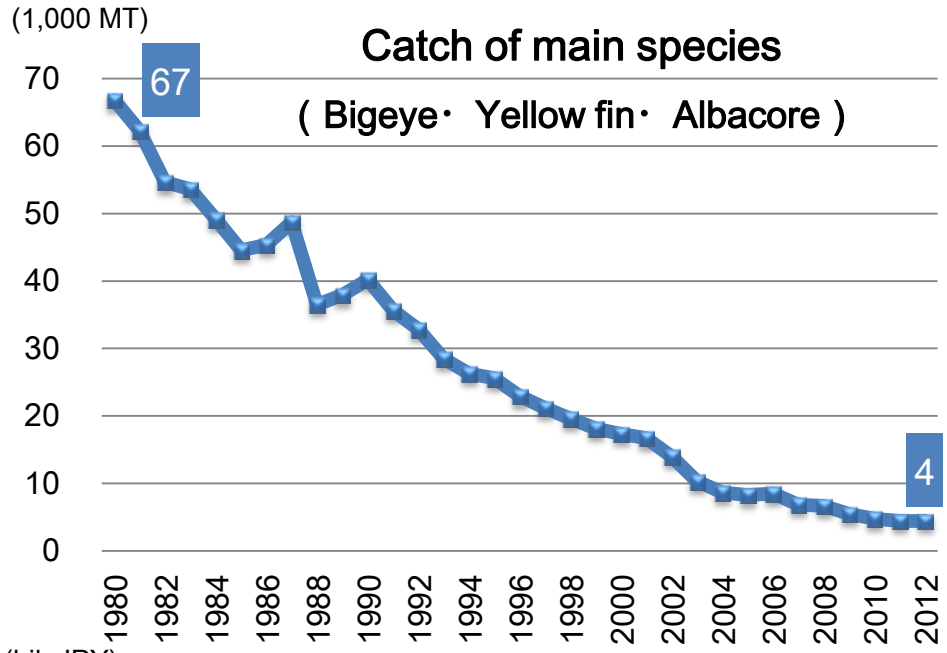
# What is Japanese small – middle scale longline ?

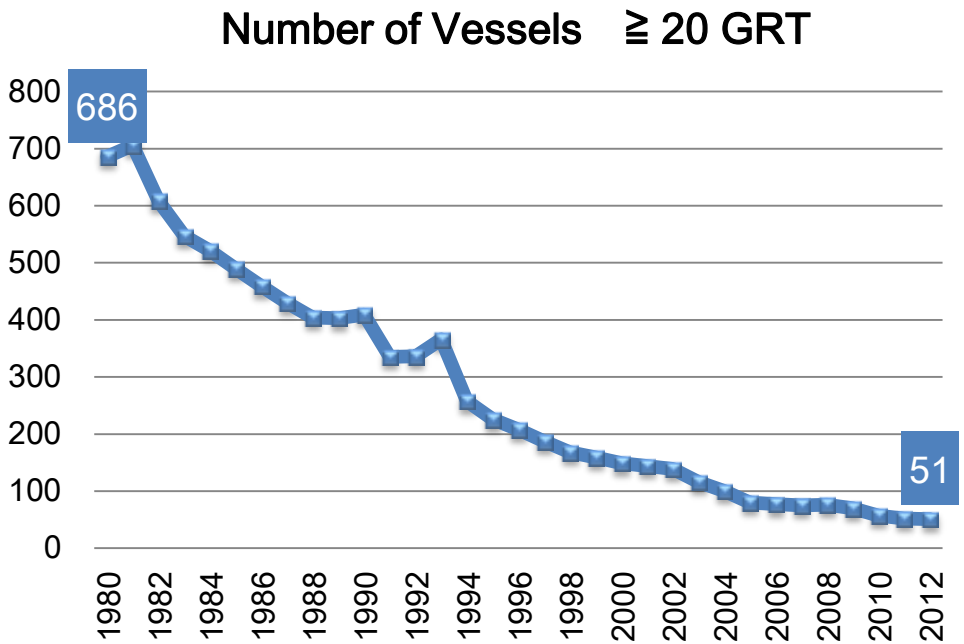
- Vessel Size:

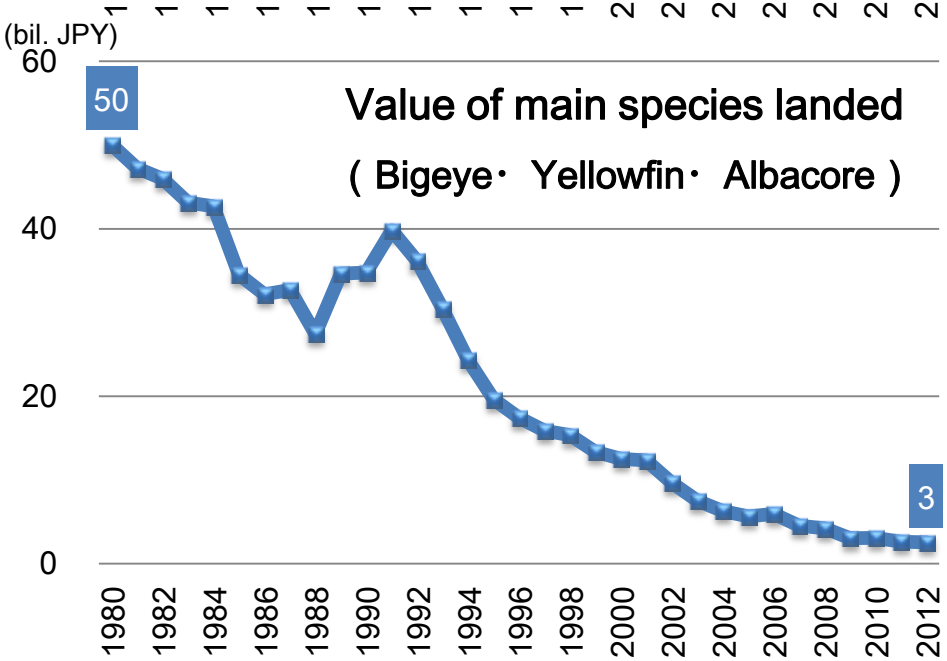
  Official Category is Smaller than 120 GRT

  Most vessels are 19 GRT (Number of Crew: 6-9).
- Fresh Fish Operation to land at Japanese port (some exception; Guam base)
- Target Species: Bigeye, Yellowfin and Albacore.
- Trip length: 20 to 35 days

# Trend of Catch, Value, and No. of Vessels



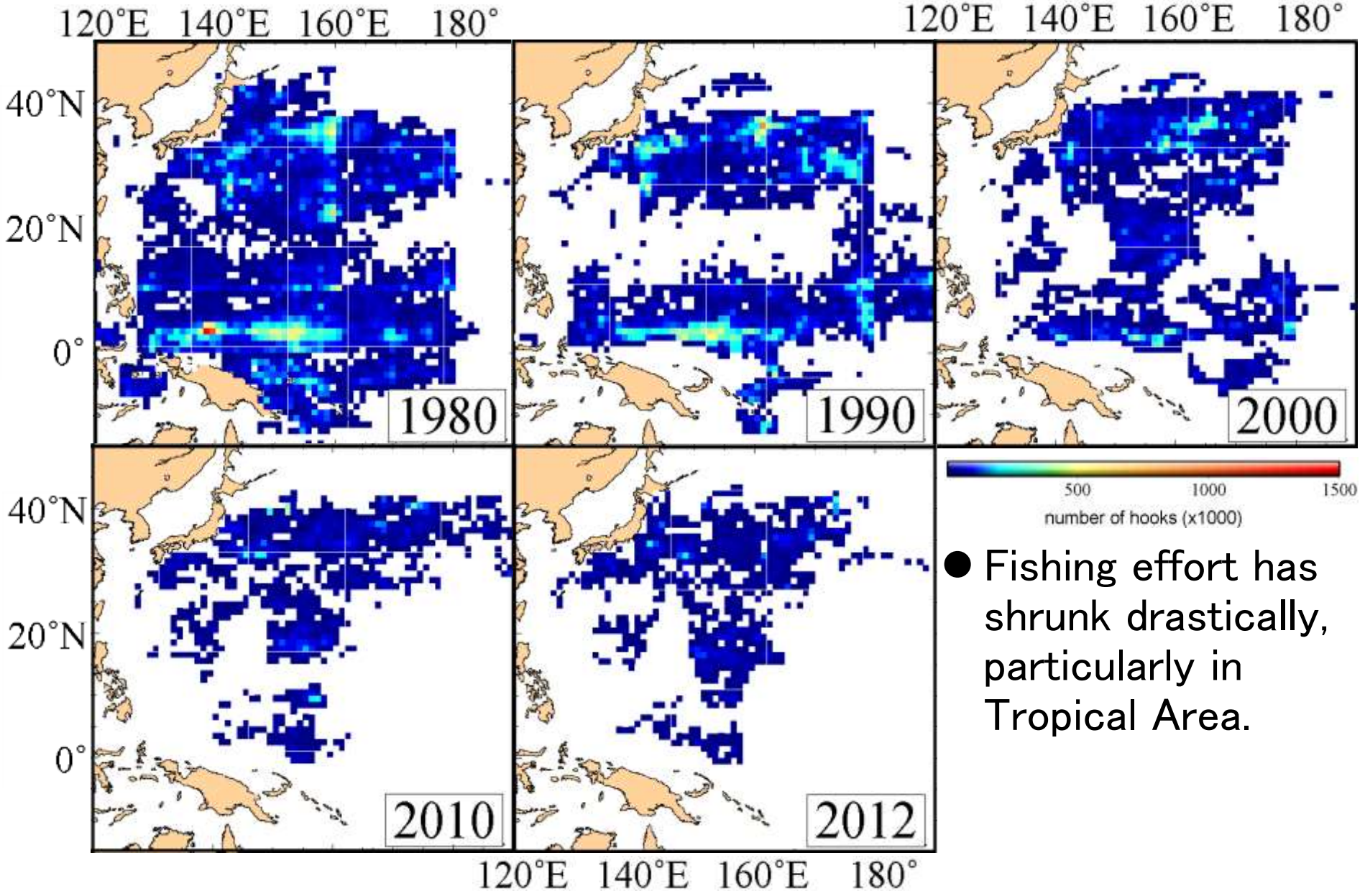




## Change from 1980 to 2012

- Catch：66,822 MT ⇒ 4,406 MT
  (**93.4% ↓**)
- Value：¥50 bil. ⇒ ¥2.6 bil.
  (**94.9% ↓**)
- No. Vessels：686 ⇒ 51
  (**92.6% ↓**)

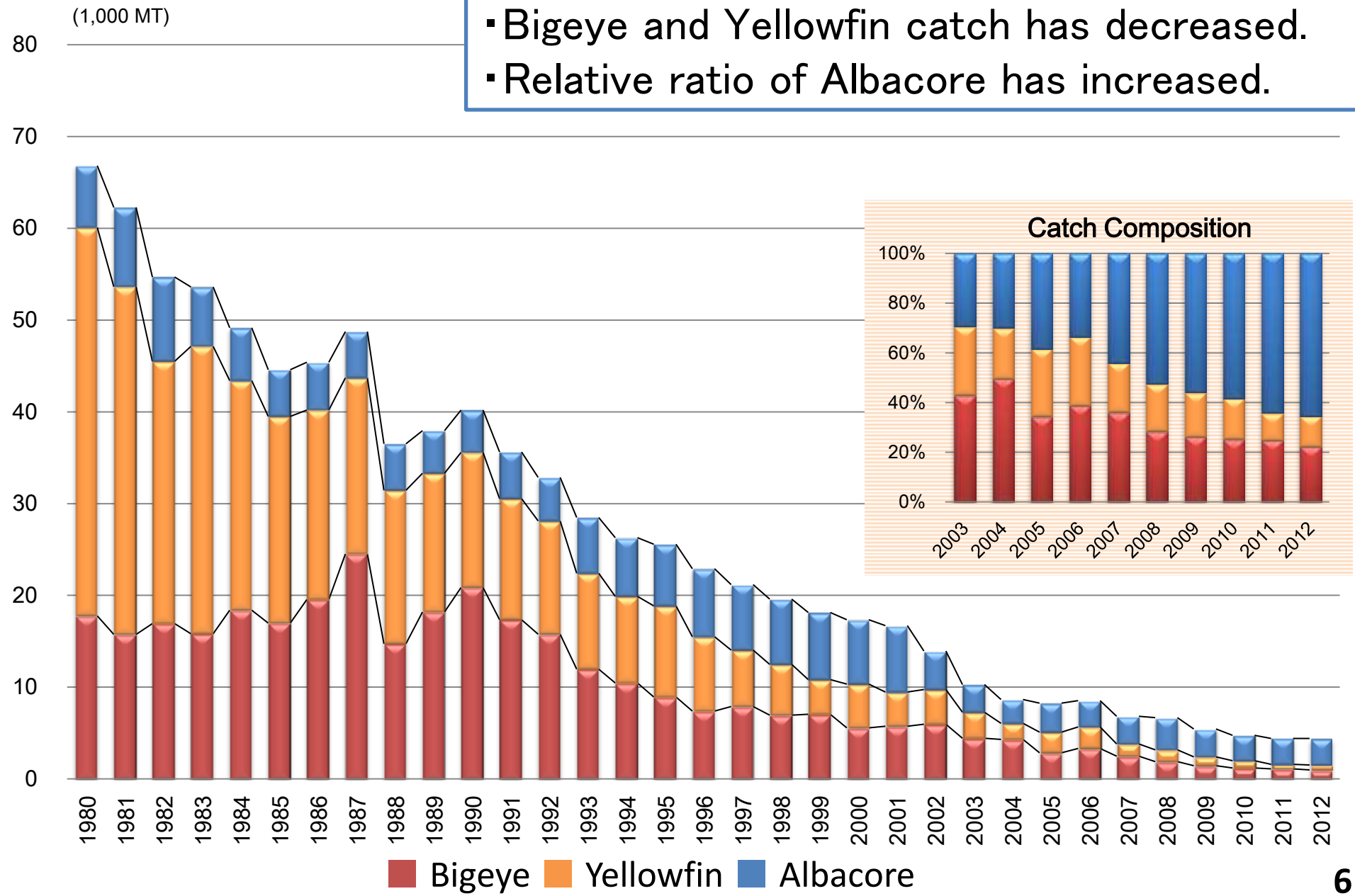
# Trend of Effort Distribution



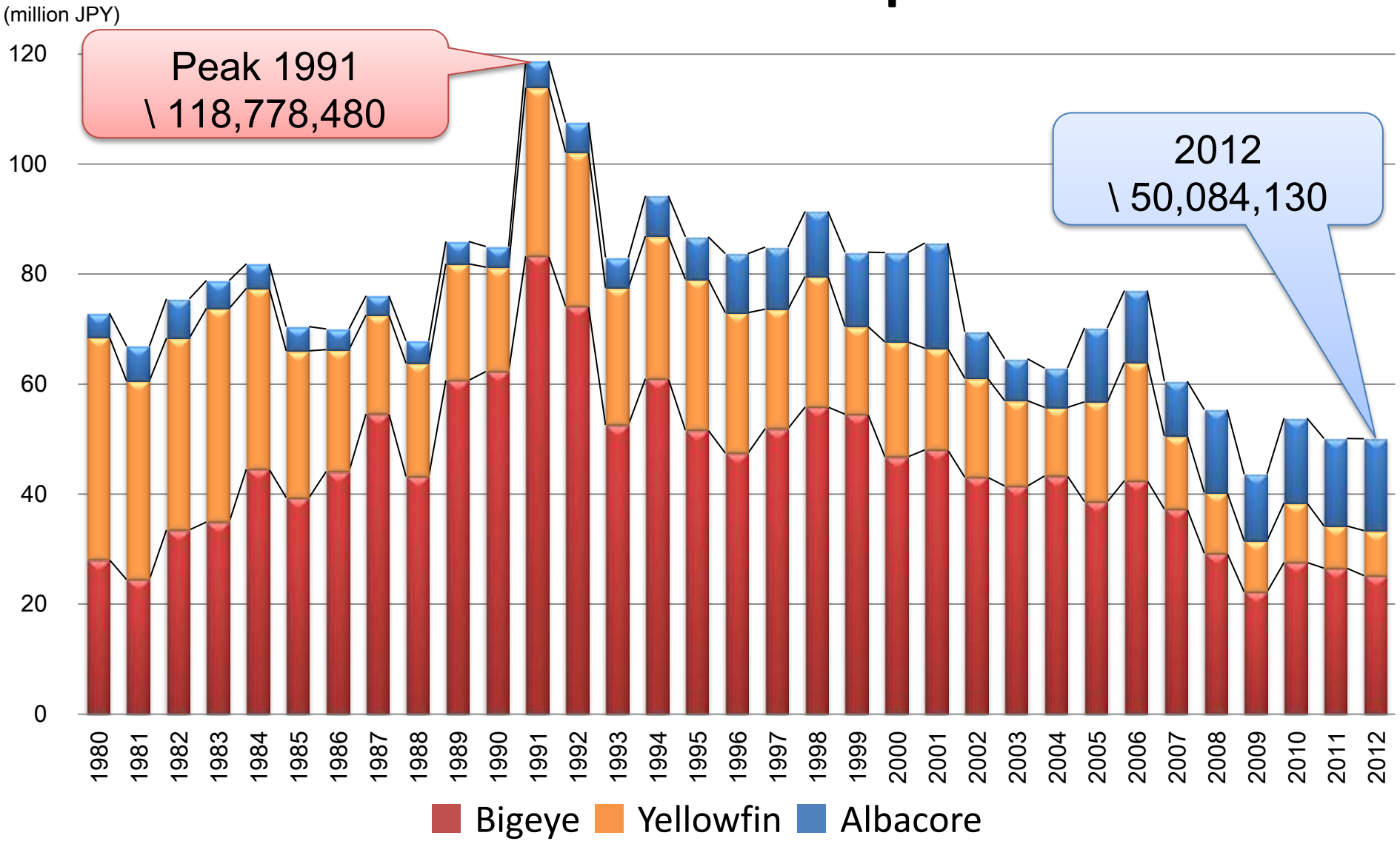

- Fishing effort has shrunk drastically, particularly in Tropical Area.

# Trend of Catch Volume by Species

- Bigeye and Yellowfin catch has decreased.
- Relative ratio of Albacore has increased.



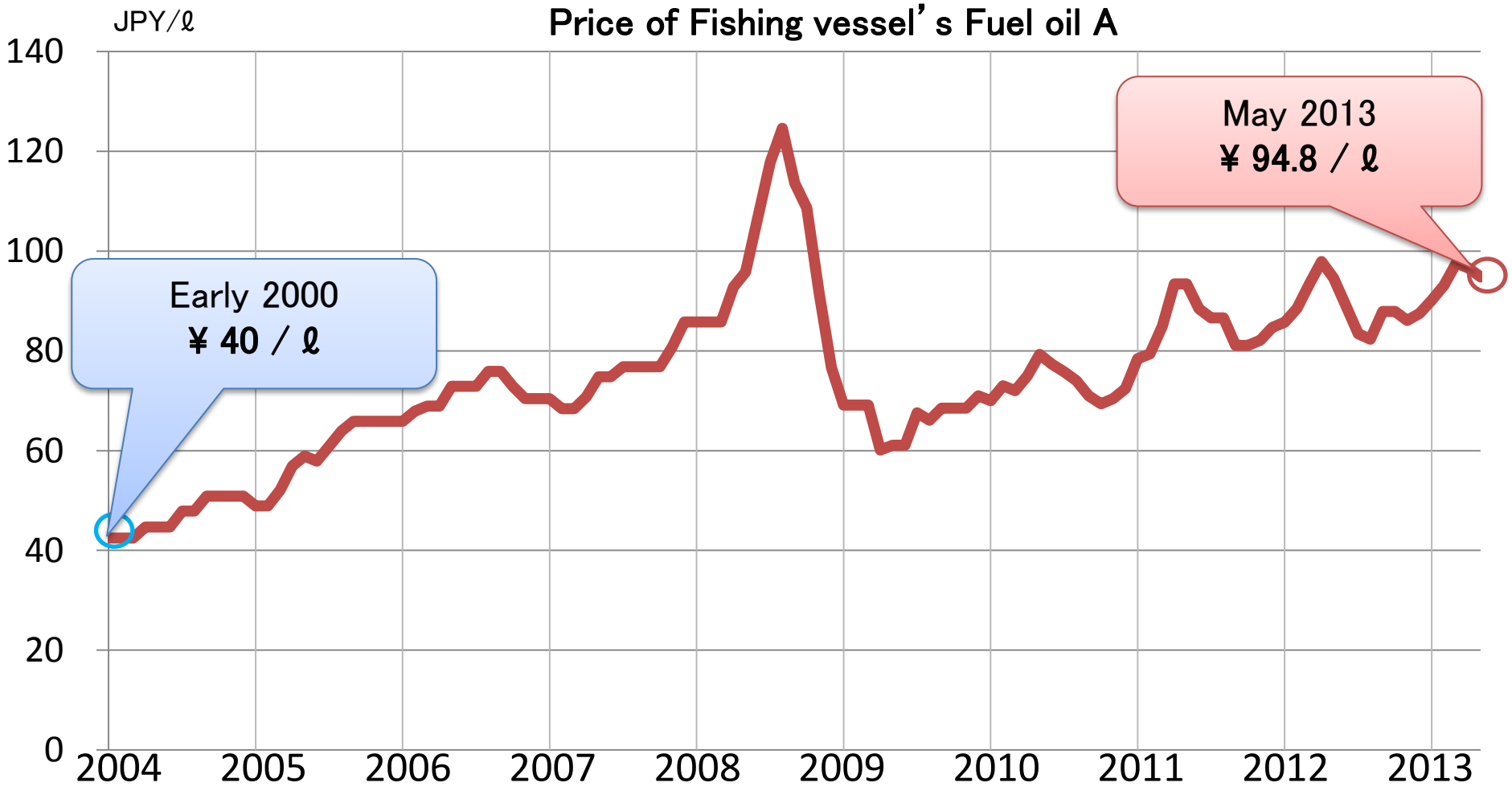
# Trend of landed value per vessel




- In 2012, landed value decreased to **42.2%** from that of 1991.
  (**about ¥69 million decline per vessel**)

# Trend of Fuel Costs

- Expenditure for annual fuel cost has increased **about ¥ 25 million** from early 2000s, assuming a vessel used 450kl per year.



# Rough estimate of net loss per vessel due to catch decrease and fuel price increase

- Catch decrease

  About \ 69 million ↓

- Fuel Prices Increase

  Hotojima : 450 kl / year　　\ 25 million ↑

  19 GRT : 300 kl / year　　\ 17 million ↑

Around \ 86 - 94 million loss.

# Case Study 1
# Oita
# = Hotojima

Area : **0.84 Km²**

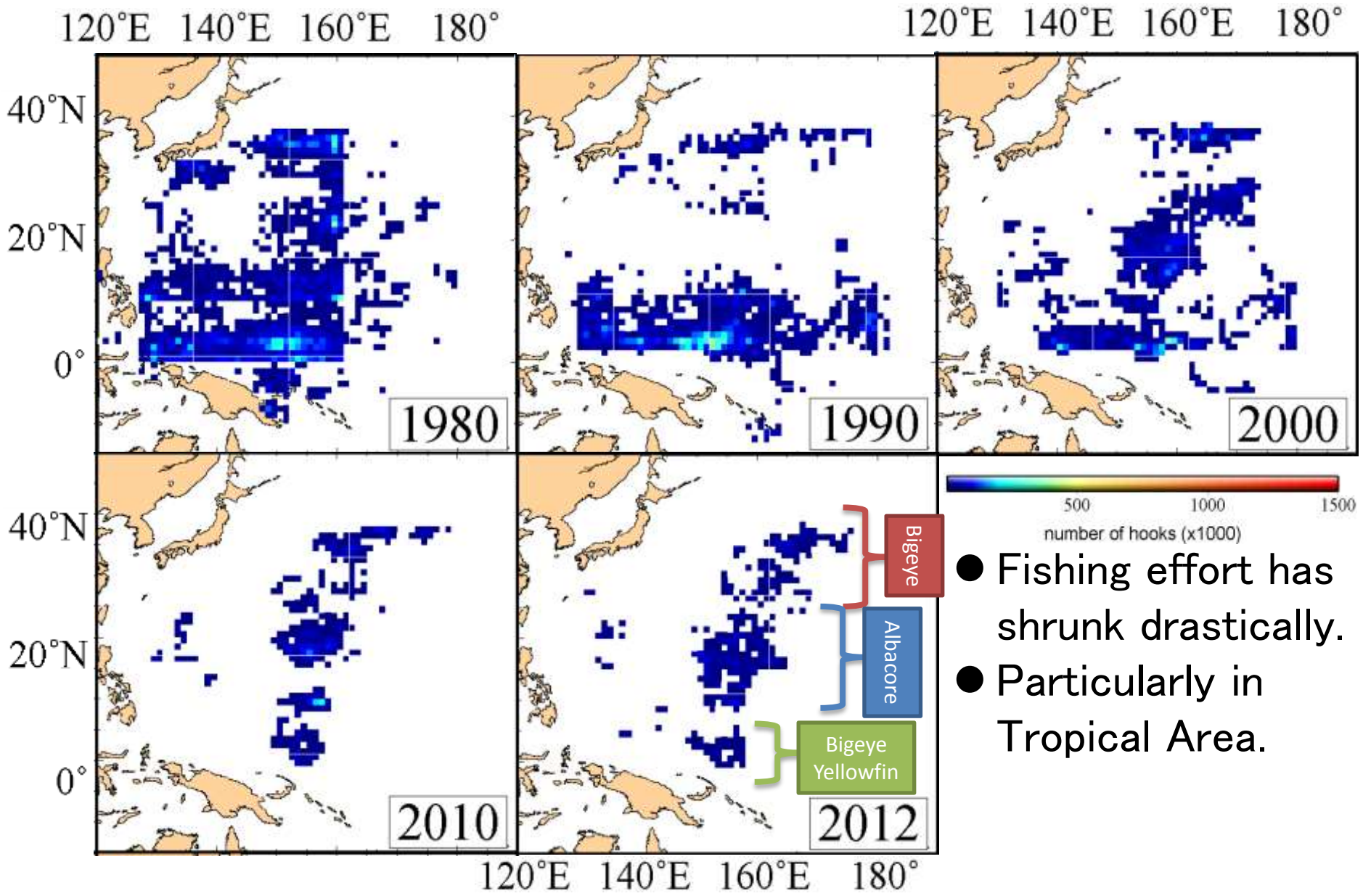
Coast Line : **4 km**

Population : **2,848 people**

(1990)

- Hotojima is a unique island; only tuna LL provides job opportunity for male.
- Almost all young boys, after graduation from a junior high school – age 15 –, board LL vessels. They can go back to homes only a few times a year.
- Women stay home in Hotojima.
- Economics of this island is directly influenced by tuna LL.

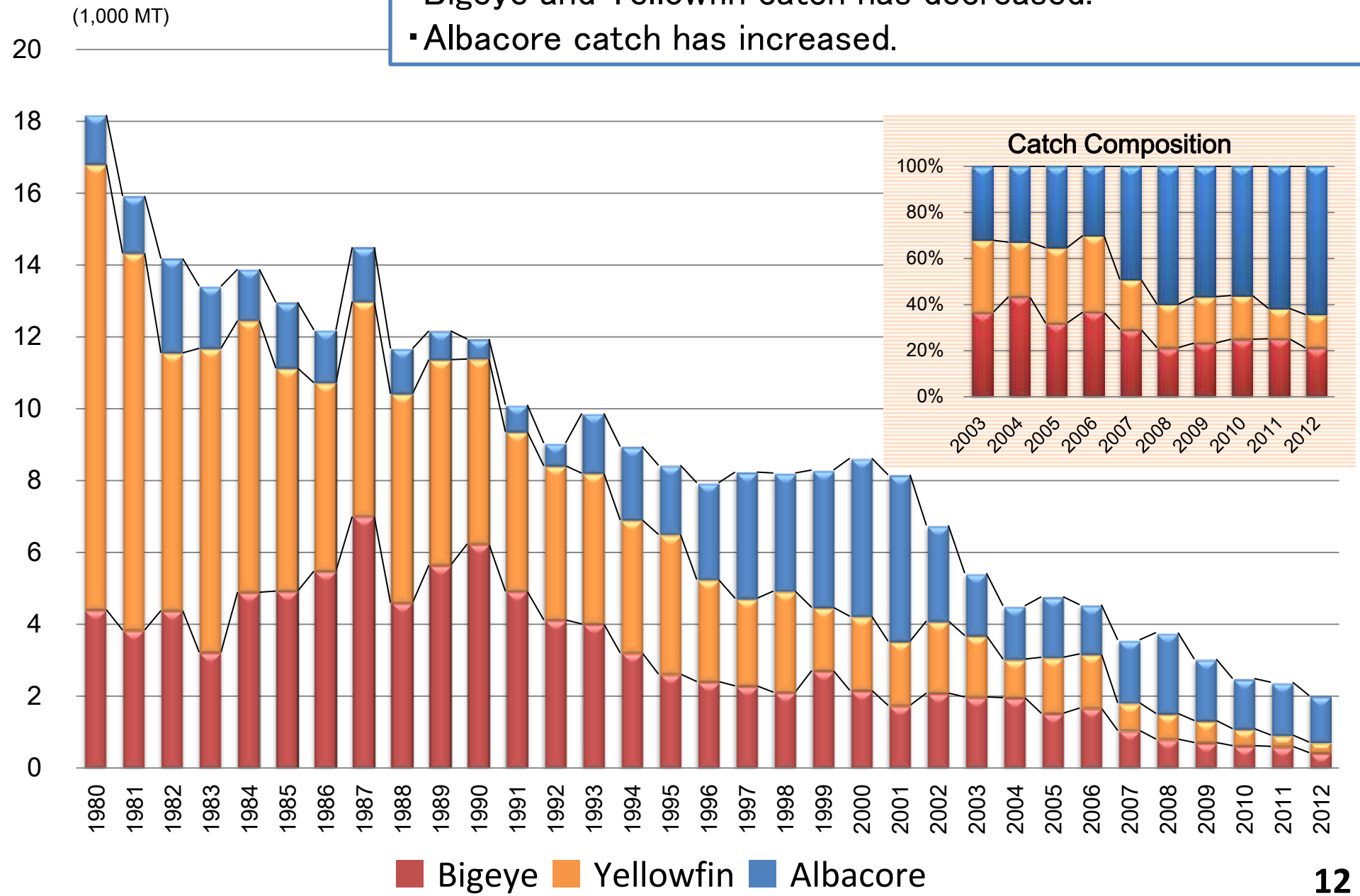
# Trend of Effort Distribution ～Hotojima～



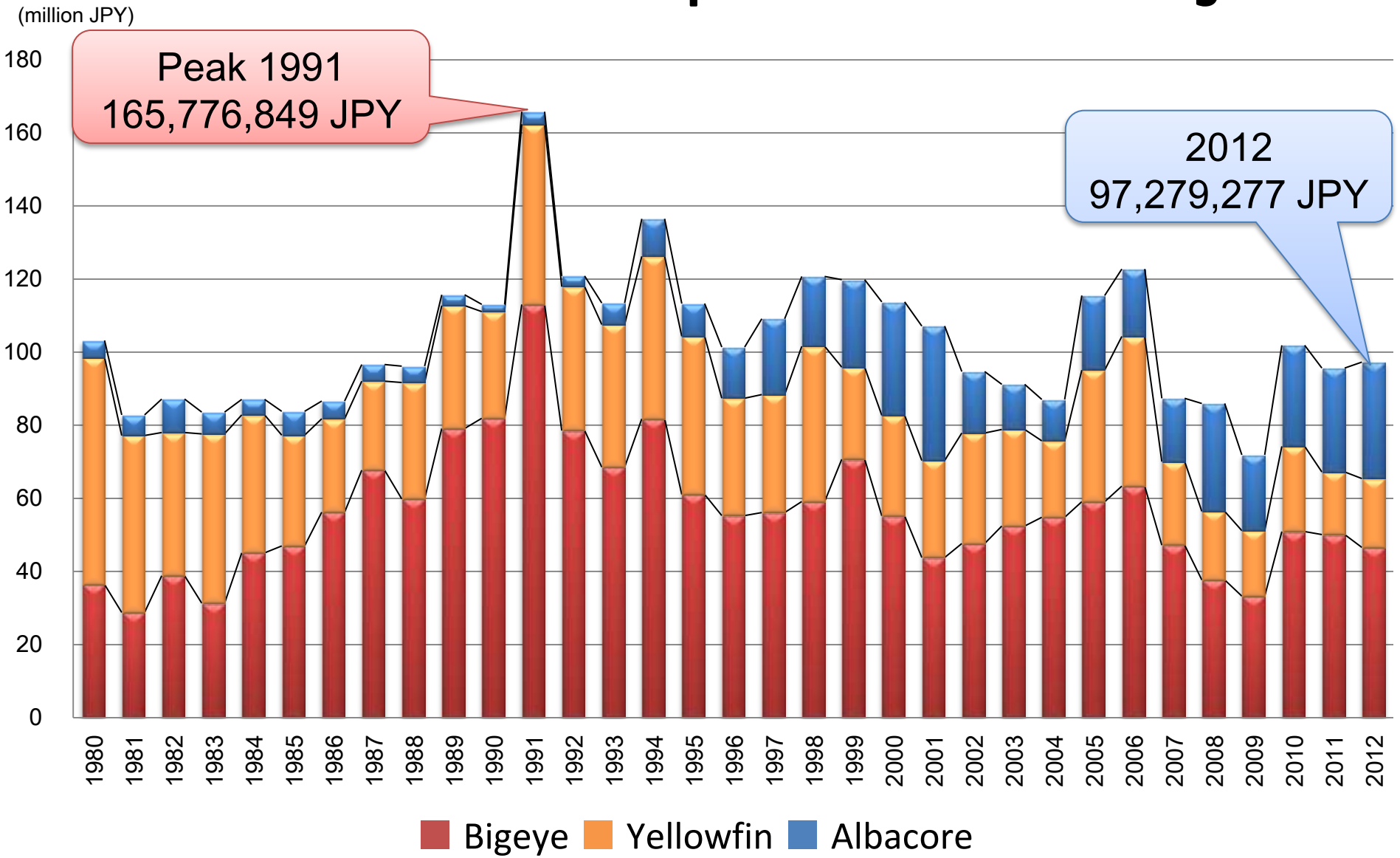

- Fishing effort has shrunk drastically.
- Particularly in Tropical Area.

# Trend of Catch Volume ～Hotojima～

- Bigeye and Yellowfin catch has decreased.
- Albacore catch has increased.



# Trend of landed value per vessel～Hotojima～




- In 2012, landed value decreased to **58.7%** from that of 1990.
  (**about ¥ 68 million decline per vessel**)

Oita
＝Hotojima

## LL decline has damaged Hotojima economy severely

- Statistics of Hotojima Tuna Longline Fisheries

| | Peak | 2011 | Compared with Peak |
|---|---|---|---|
| No. Vessels | 167 (1980) | 20 | 88%decrease |
| Catch | 23,000 MT (1980) | 5,563 MT | 76%decrease |
| Value | 14 bil. JPY (1990) | 3.4 bil. JPY | 76%decrease |

**Population: 2,848 people (1990) ⇒ 978 (2010年)**

**Danger of existence of Local Community!**

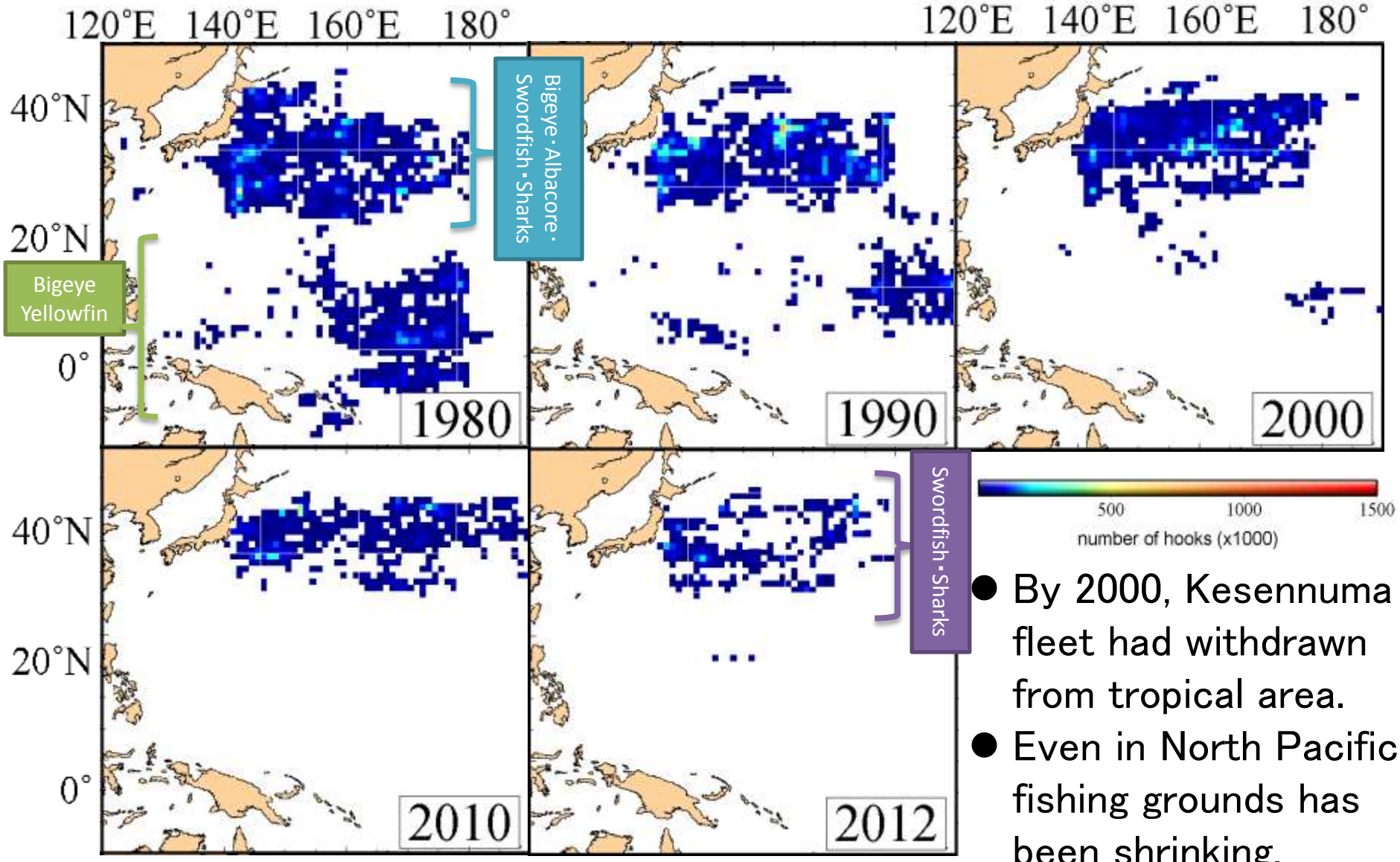
# Case Study 2
# Miyagi
# =Kesennuma

- **About Kesennuma city**

| | |
|---|---|
| Area | 333.38 $Km^2$ |
| Population | 17,483 people |

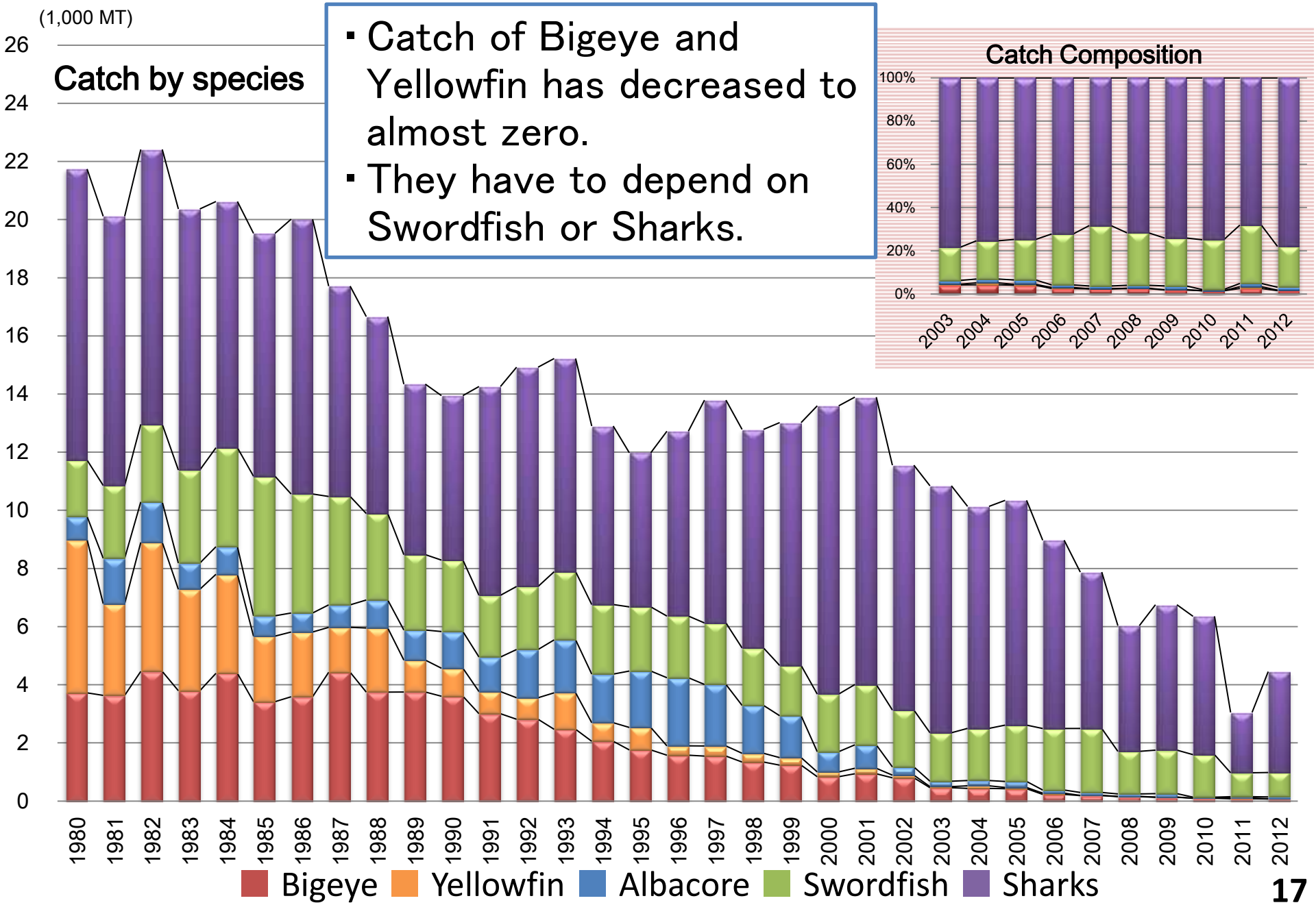
- Kesennuma city is at north-east part of Miyagi prefecture facing Pacific ocean.
- It has been developed as one of the largest Fisheries Town in JAPAN.
- Kesennuma Fishing Port has been a home port of many Offshore and Farseas Fisheries such as large scale LL and PS.
- Most of local economics depend on fishery or related industry such as fish market and fish processing and other supporting industry.

# Trend of Effort Distribution ～Kesennuma～

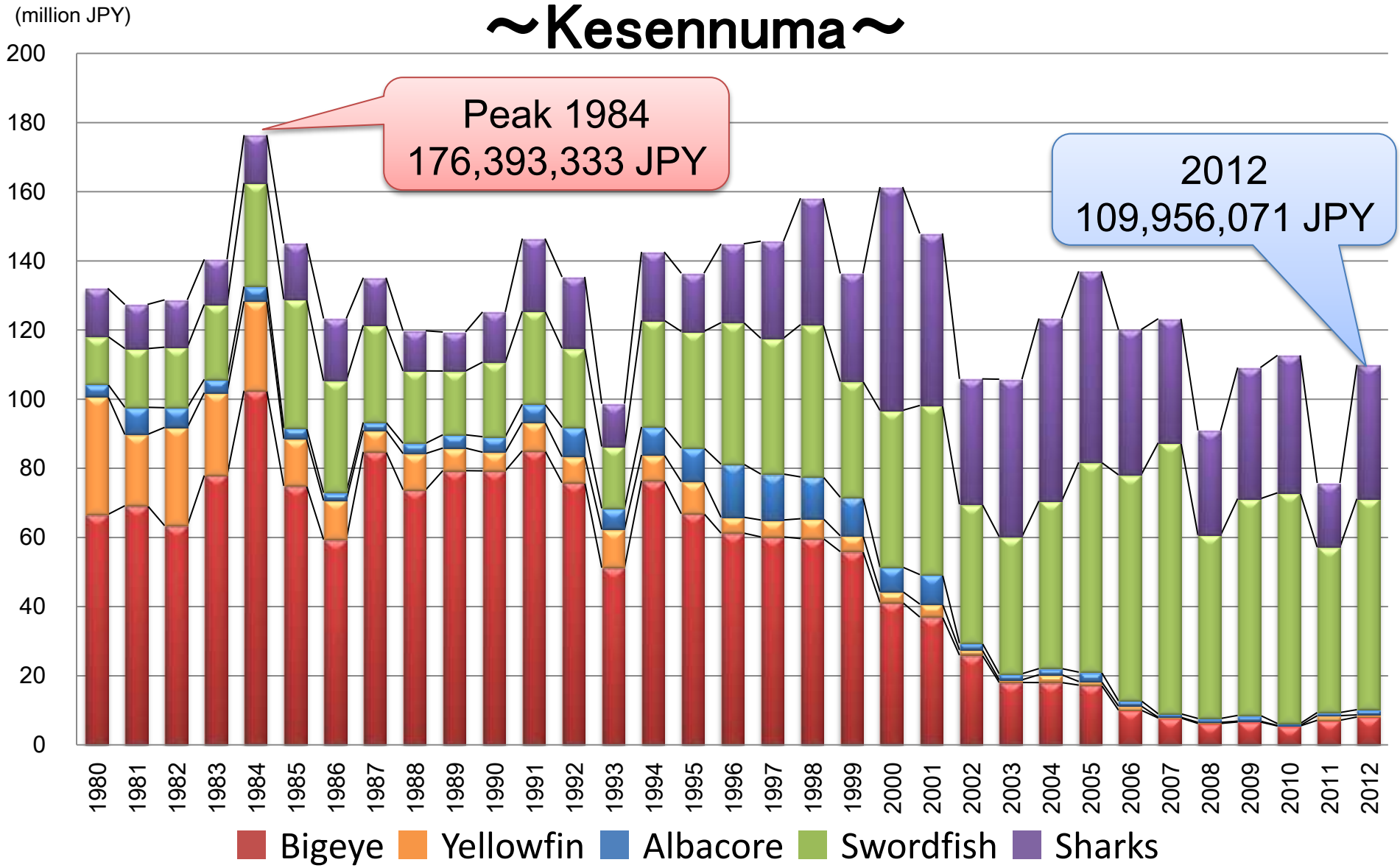



- By 2000, Kesennuma fleet had withdrawn from tropical area.
- Even in North Pacific, fishing grounds has been shrinking.

# Trend of catch volume ～Kesennuma～



# Trend of landed value per vessel ～Kesennuma～




- In 2012, landed value decreased to **62.3%** from that of 1983.
  (**about ¥ 66 million decline per vessel**)

Miyagi

=**Kesennuma**

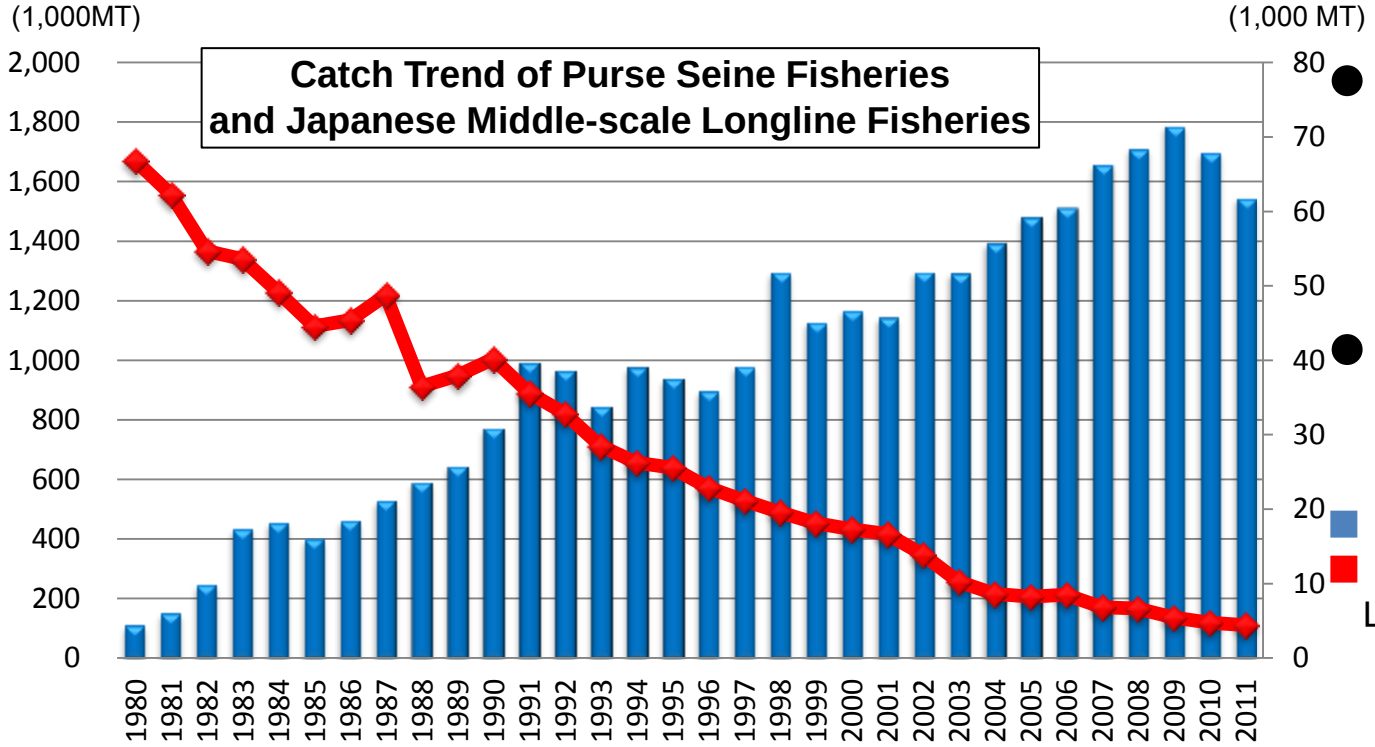
- Tsunami hit Kesennuma in 2011
  - No. of Death or Missing about 1,300
  - No. of Damaged House about 11,000
- 5.4% of city area was flooded by Tsunami.

● Total Fisheries Catch volume and value at Kesennuma Fishing Port

| | Before Tsunami (5 years ave.) | 2012 | |
|---|---|---|---|
| Catch | 109,327 MT | 57,676 MT | **52.7% recovery** |
| Landing value | 23.2 bil. JPY | 14.3 bil. JPY | **61.6% recovery** |

**Only 60% recovery** even 30 months after Tsunami disaster!

# Conclusion




- Since 1980's, Japanese small-middle scale Longline has declined substantially.
- PS catch has shown opposite trend.

- This decline has made a critical damage to the economy of local communities in coastal line such as Hotojima and Kesennuma
- In particular, **community existence is at risk in Hotojima**.
- Even if 30% reduction of Bigeye were to be achieved in 2017, additional years will be needed for actual recovery of the resources.
- It is not clear whether local communities in Japan still exist until such time.
- Japanese small-medium LL is a real victim of PS expansion.