

Fisheries regime shifting through time in the Gulf of Thailand

Presented at DOF-MENU stock assessment workshop on JABBA
20 May 2025

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Disclaimer

There are limited official/systematic documentation of Thai fishery historical events.

Some were written in national fisheries statistics but not consistency report as time series.

Some were reported in DoF technical papers which provided the situation at/during the study period.

Therefore, the contents in this presentation are gathered from published documents, compiled and made it available based on my understanding.

Short information on

1. Development of Thai fisheries
2. Catch composition changed through time in the Gulf of Thailand

Development of Thai fisheries

History of Thai fisheries can be classified into 4 periods

1. Early period

Thai fisheries can be dated back to 1960s (as far as have references)

Before 1960s, fisheries were mostly artisanal/coastal fisheries using gill nets, handline, others.

Shallow bamboo stalk trap (โป๊ะไมไผ่ for Thai name) targeting short mackerel and other pelagic species was considered as commercial fishery.

Seerfish gill net also a commercial gear.

In 1961, Thai DoF introduced bottom trawling technique, with technical support from Federal Republic of Germany (*Tiew, K. n.a.*). The result was fascinating.

Commercial purse seine was introduced later in the mid 1960s

The introduction of high efficiency gears dramatically changed Thai fisheries in later five decades

2. Developing period

In 1960s – 1973, due to motorizing of fishing vessels and introduction of high efficiency fishing gears i.e. bottom trawl and purse seine, **fishing vessel number was sharply rose (sharp increased of fishing effort)**. Resulting tremendous increasing of marine catch.

However, there was a stagging period caused by world oil crisis in 1973-1974, as oil (fuel) is #1 expense in operation cost.

1975 – 1994, large Thai fishing vessels (>24 m LOA) started to fish in neighboring waters, Myanmar, Vietnam, Malaysia and high sea.

3. Stable period

After declaration of Exclusive Economic Zone (EEZ) by neighboring countries, Vietnam in 1994 and Malaysia in 1996, **Some Thai vessels were forced back to fish within Thai waters.** However, some vessels can still operated in high sea

The increasing number of vessel in Thai EEZ resulting in **sharply increased fishing effort**, especially in the Gulf of Thailand.

This period longed approximately 20 years, in 1995 - 2015

4. Current regime (strictly effort control)

2015 – 2023 (present)

The new fisheries regime was enforced in 2015 for combatting IUU fishing

Several management measures and procedures were superseded or changed to suit the regime

- The full control of commercial vessel is implemented

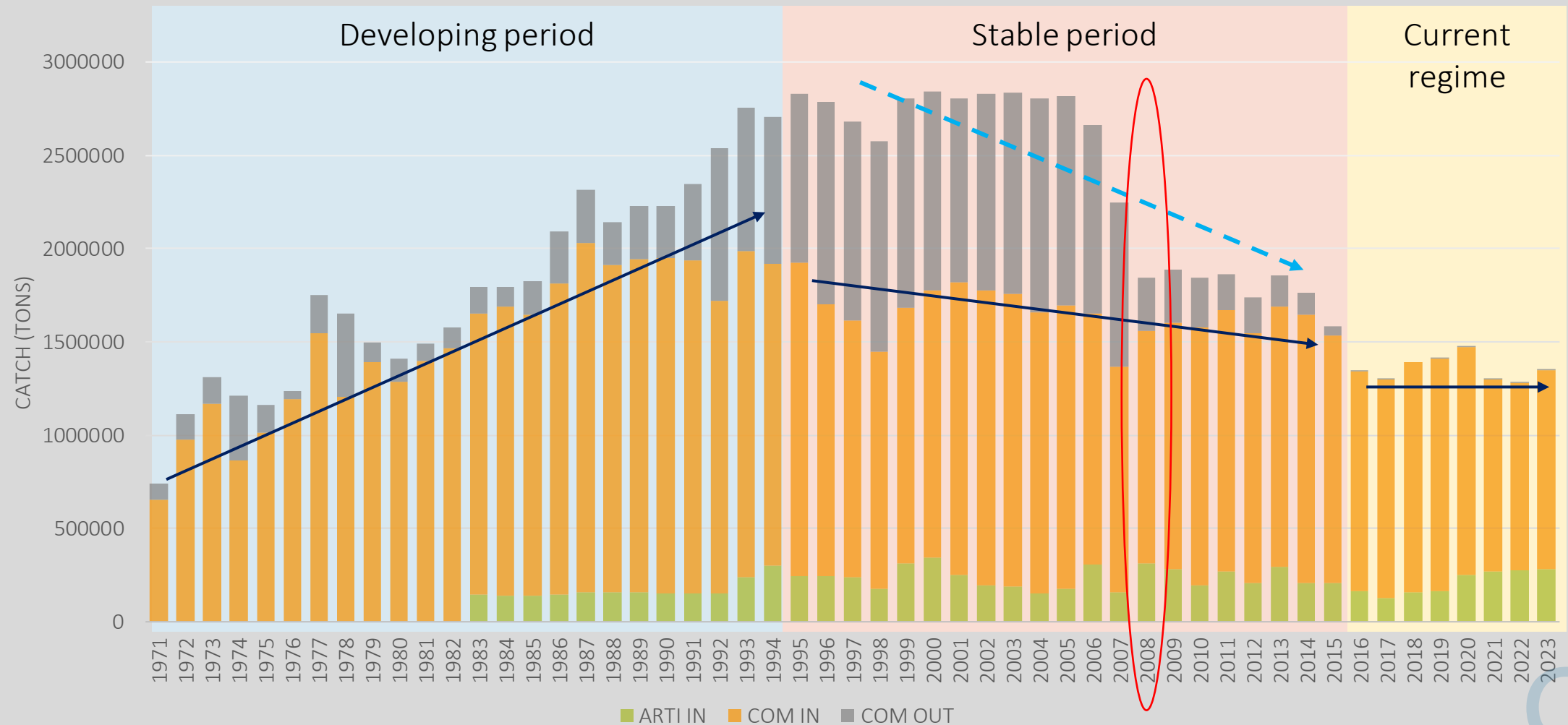
- Improving fisheries data reporting and collection

80% of fishing effort is controlled, vessel number, gear standard; commercial vessels can be monitored fishing activities through Fisheries Monitoring Center (FMC)

The rest of 20% is control by technical regulations and gear standard (artisanal vessels)

Is Hamburger crisis in 2008 affected the catch?

Statistical catch of Thai fisheries in Thai waters by fishery types



Catch composition change through time in the Gulf of Thailand

An another research using Thai statistical catch

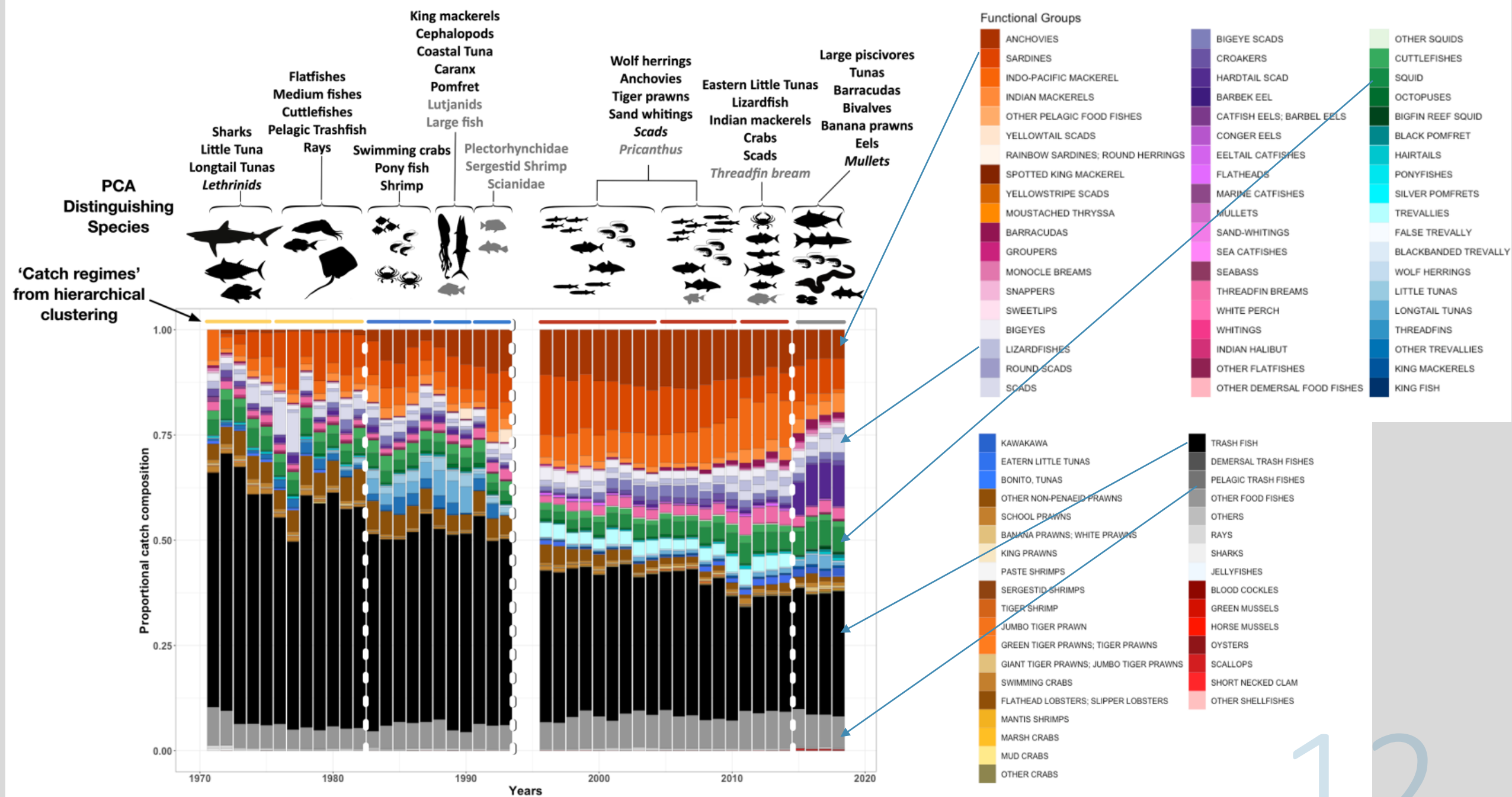
Shifting baseline and deciding on the desirable form of multispecies maximum sustainable yield

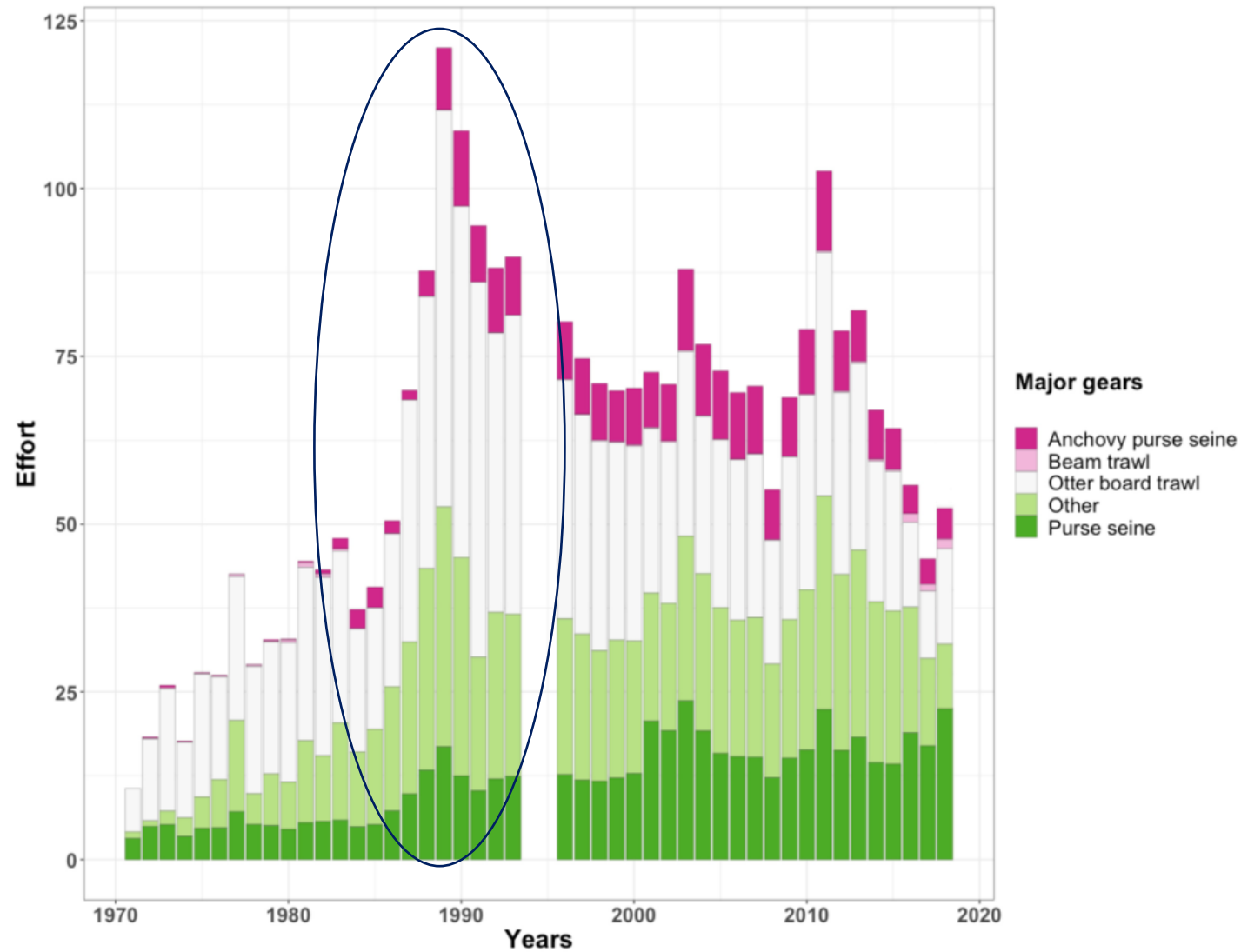
The recent research done in the Gulf of Thailand (can access [here](#))

The authors: E. A. **Fulton**, K. **Sainsbury**, P. **Noranarttragoon**, D. Leadbitter, D.J.**Staples**, J. Porobic, Y. Ye, R. Phoonsawat and N. **Kulanujaree**

The study aimed to explore how possible to apply multispecies MSY for management scheme, using statistical catch and research vessel CPUE up to 2019

An interesting part is **the catch composition in the GoT changed through time**





- Effort of the major gears used showed the change of catchability in the GOT
- This is consistency with the increasing catch 1990s, as described earlier

Figure 3. Standardised effort per major gear type used in the Gulf of Thailand.

In summary

To conclude, there **3 different regime based on statistical catch**

1. **1960s - 1994**; developing state to reach mature state. Sharp risen of coastal fishing effort
2. **1995 - 2015**; high fishing effort in Thai EEZ due to steadily increasing of coastal vessels and large scale vessel that forced back to from neighboring countries
3. **2016 - 2023**; implementation of strictly measures on limited access and full scale monitoring. the fishing effort was kept in balance.

Thank you for your attention

ご清聴ありがとうございました
Go seichō arigatō gozaimashita

Any questions are welcome!