### How to submit seer fish catch and CPUE data

Indo-Pacific King Mackerel Narrow-barred Spanish Mackerel

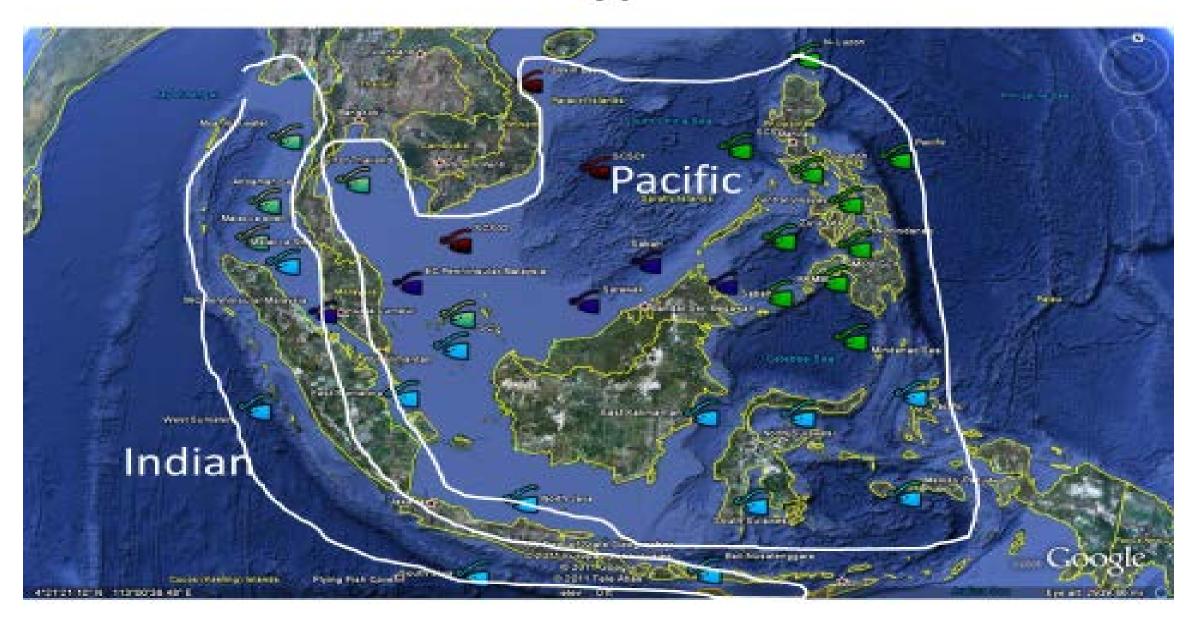
Tom Nishida Your resource person

# We assume that we use ASPIC again stock assessments (Spanish and King mackerel)

Then we need 3 information

- (1)Global catch
- (2) CPUE
- (3) Species composition

# 2 stock hypothesis



### Indonesia, Malaysia and Thailand need 2 data sets

#### Pacific and Indian stocks covered by country

<u>F</u>	-	-
₽	(a) Pacific stock	(b) Indian stock
	FAO 71 area₽	FAO 57 area ℯ
(1) Brunei₽	47	₽
(2) Cambodia₽	₽.	*
(3) Indonesia (2 stocks)	47	ب د
(4) Malaysia (2 stocks)	47	42
(5) Myanmar	Į.	ب ج
(6) Philippines ₽	ą.	\$
(7) Thailand (2 stocks)	47	4
(8) Viet Nam₽	47	*

4.1

# Annual catch (tons) by country and gear

Example Thailand (Pacific stock) gear: GILL

	Spanish	King	Combined
1995	,		1234
1996	;	;	2987
2014	2345	1243	
2015	3124	3786	

CPUE by country, gear, area, year, month, day and set (boat name) as <u>fine scale</u> as possible (<u>set by set is ideal</u>) important for CPUE standardization

If you don't have set by set data, you can send aggregated levels of CPUE that you have...

For example CPUE by gear, area and month

# CPUE Example 1 (if species are separated) O and other catch are very important! Don't forget!!

Thailand Pacific stock	<b>Gear</b> : <b>GILL</b>	Area: 5 (Gulf of Thailand)
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						catch (kg			effort	
year	month	date	boat name	set	King	Spanish	others	hours	hauls	days
1999	1	1	Α	1	34	0	234	12	4	2
1999	1	1	Α	2	0	0	566	23	4	4
2015	12	27	С	1	0	0	999	44	5	5
2015	12	27	С	2	0	0	234	23	3	4
2015	12	28	C	1	23	11	333	12	4	5

# CPUE Example 2 (if species are combined) O and other catch are very important! Don't forget!!

		catch (k	(a)	effort		
year	month	king+Spanish combined	others	hours	hauls	days
1999	1	34	234	12	4	2
1999	1	0	566	23	4	4
2015	12	0	999	44	5	5
2015	12	0	2334	23	3	4
2015	12	23	333	12	4	5

# (3) Species compositions

Any information of Species compositions
(King and Spanish) by year, season and area (as fine scale as possible) are important to estimate catch and CPUE by species

If you don't have fine scale information, even <u>coarse scale</u> information are also important For example Philippines..

**Average Species compositions by gear**