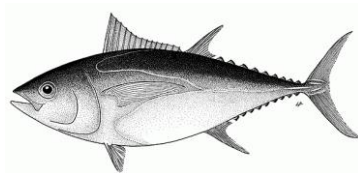


Data-limited tuna and tuna-like fisheries: a way forward?

Nicolas L Gutierrez
Marine and Inland Fisheries Branch, FAO

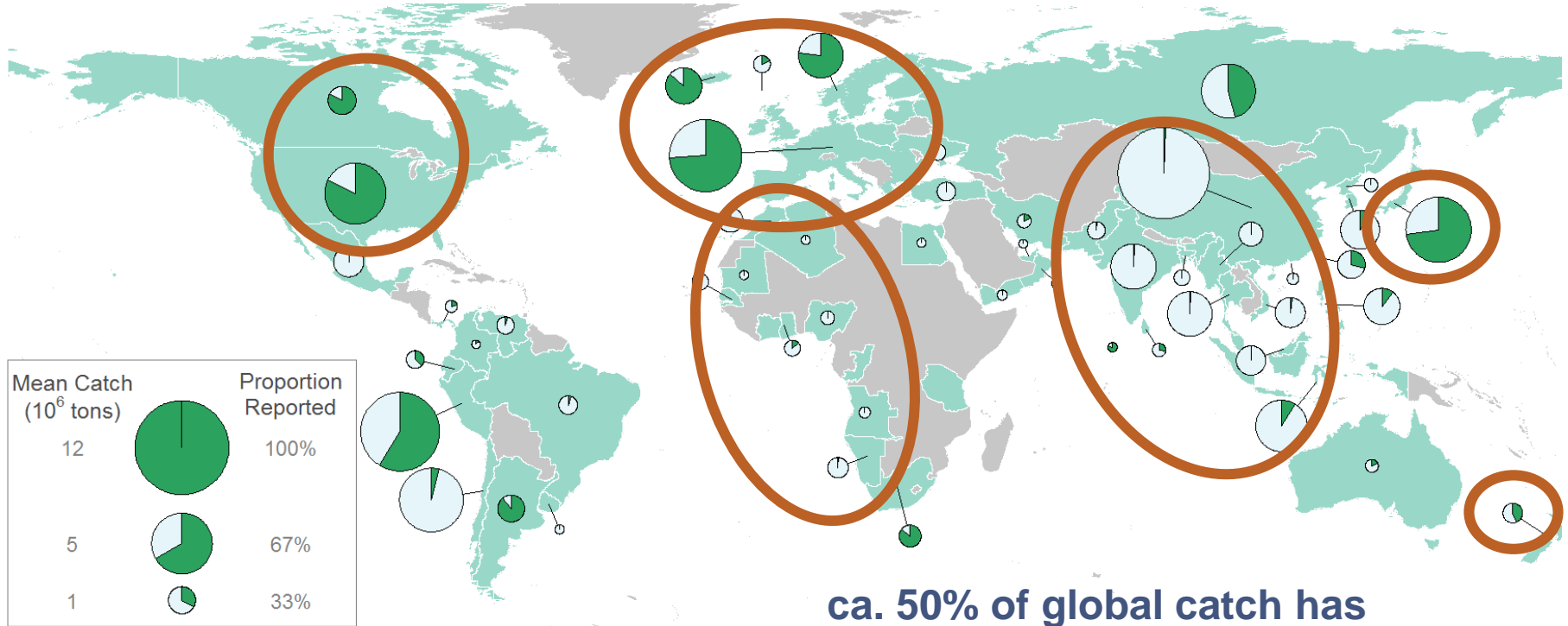


Technical Workshop on Global Harmonization of tuna fisheries statistics

19-22 March 2018
FAO HQ, Rome ITALY

The problem

- Data-limitations to inform assessment and management are a global problem



ca. 50% of global catch has quantitative assessments (2017)

Caveats:

1. Assessment may be available but not public (e.g. in RAM)
2. A fishery may lack quantitative assessment but still sustainably managed

RAM Legacy Stock Assessment database. Ricard et al. 2011 (last accessed: Nov 1st 2017)

The problem

- Data-limitations to inform assessment and management are a global problem
- Assessed stocks are generally better managed

ICES Journal of
Marine Science

ICES Journal of Marine Science (2014), 71(5), 1040–1046. doi:10.1093/icesjms/fsu034

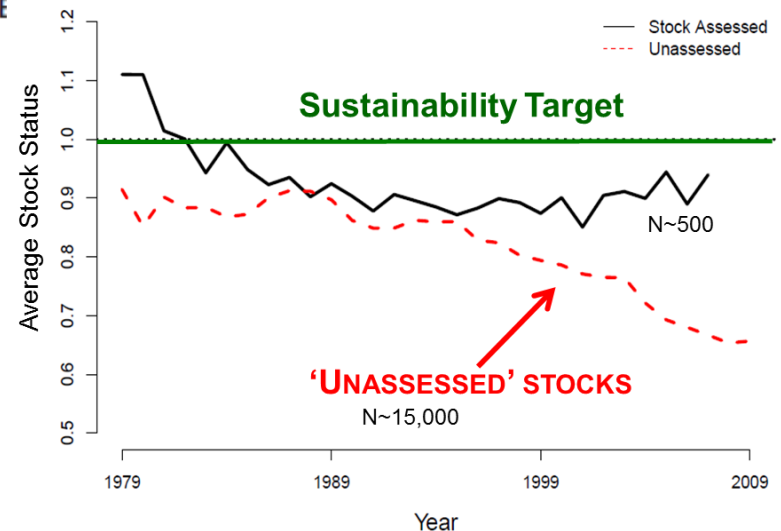
Food for Thought

Reflections on the success of traditional fisheries management

Ray Hilborn^{1*} and Daniel Ovando²

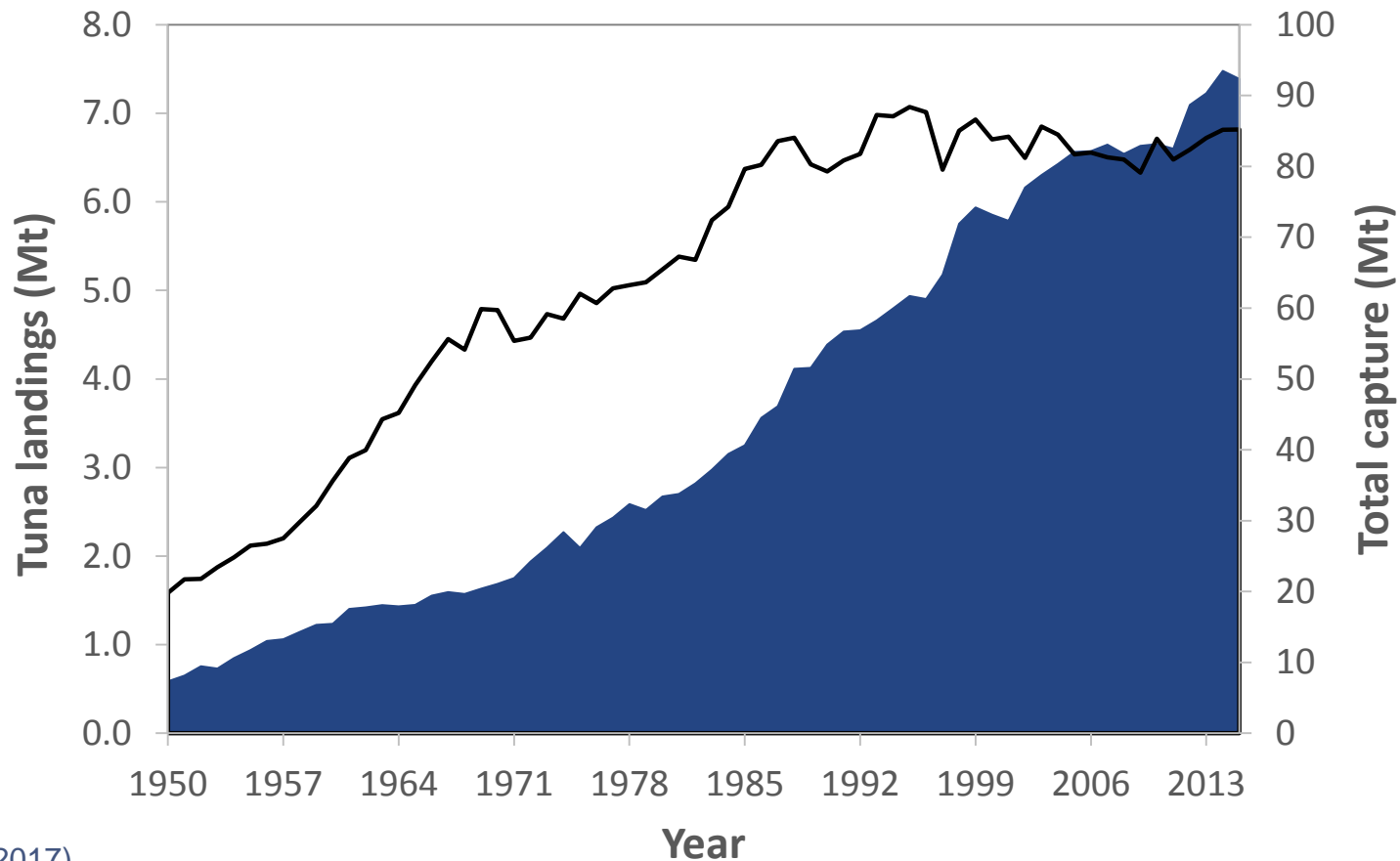
Status and Solutions for the World's Unassessed Fisheries

Christopher Costello,^{1*} Daniel Ovando,¹ Ray Hilborn,² Steven D. Gaines,¹
Olivier Deschenes,³ Sarah E



The tuna situation

- Total tuna and tuna-like capture (2015): 7.5 million tons (9%)

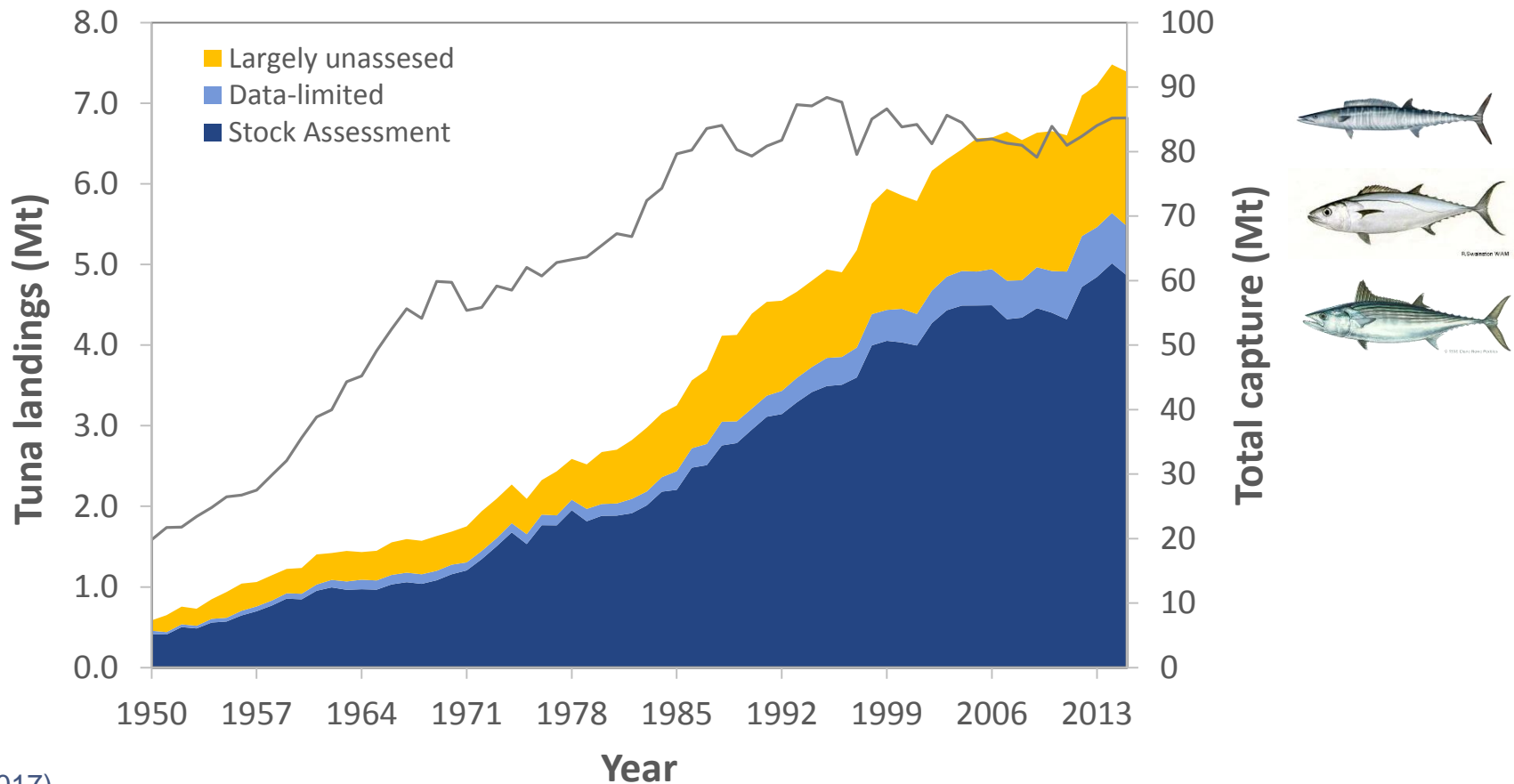


FAO (2017)



The tuna situation

- Total tuna and tuna-like capture (2015): 7.5 million tons (9%)
- Ca. 2 mt (25%) largely **unassessed** (small tuna, neritics, etc.)



FAO (2017)



'Assessment' options

Less data

More data

Expert's judgement
TEK,
Secondary

Qualitative
(changes in
distribution,
sizes), and

Empirical
indicators

(traffic light, %
of mature, %

Empirical
indicators
w/times
series (CPUE

Catch-only
and length-
based
models:

Full stock
assessment:
fishery
dependent
(F) and
independent
data, age-,
length- or
size-based

Improving data and information towards
assessment

Risks-based (no RPs)

Empirical assessments
(RPs)

Model-based stock
assessments (RPs)

All data is (can be) used to inform management!

FAO current work

- Develop technical guidance for data-limited harvest strategies
- Develop products and training on data collection for artisanal, small-scale fisheries
- Provide training on data-limited management strategy evaluation (use of DLMtool): e.g. IOTC; ICCAT next
- ABNJ tuna project (FAO-GEF): Second phase to have a strong focus on data-limited tuna fisheries



To discuss

- What are tRFMOs currently doing to improve data and information for ‘unassessed’ stocks?
- What can be done in the near future? Barriers?
- How can FAO support data improvements at the tRFMO level?

