

Moving Towards Market Based and Incentive Based Approaches for Tuna Management in the Western and Central Pacific – The case of the Parties to the Nauru Agreement (PNA).

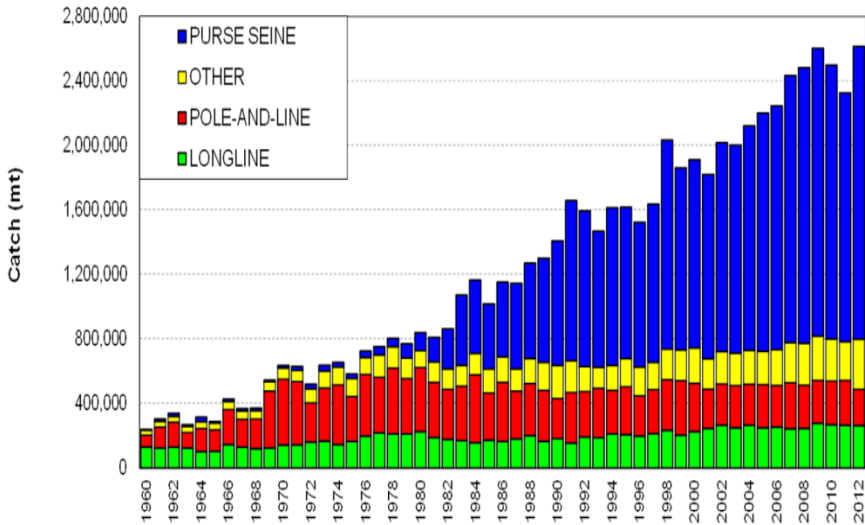
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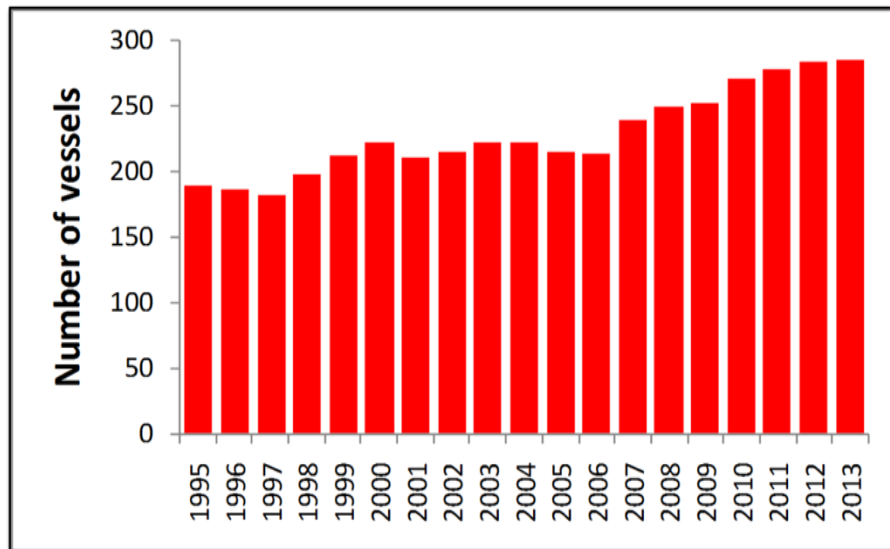
IIFET Conference – 7 to 11 July 2014, QUT, Queensland, Australia.



Purse Seine Fishing

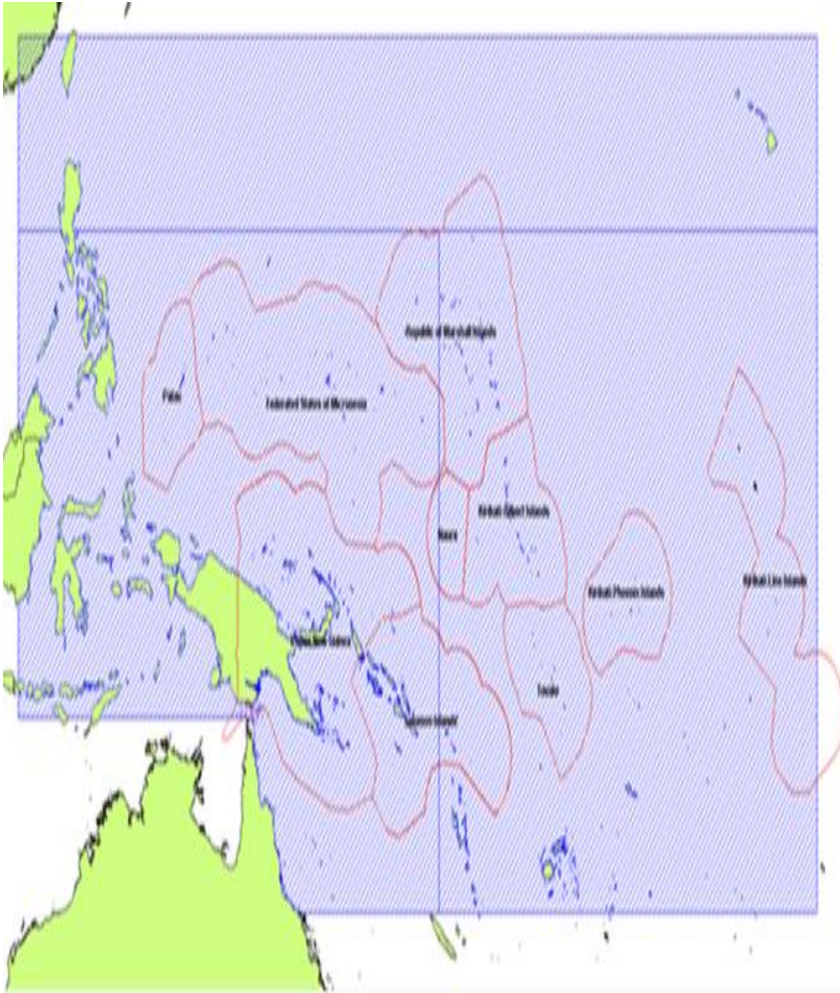


- **Problem**: Purse seine overfishing
- PP and LL catch (yellowfin and bigeye) are constant but PS bycatch is increasing



- PS Vessel no. increase from <200 (1995) to almost 300 (2013).

PNA Background



- Parties to the Nauru Agreement – 8 tuna-rich PICs (1982)
- >50% of the World tuna supply
- PNA response (Market and Incentive Based Approaches)
- Supported by the FFA and WCPFC

Research Questions

- 1) Why and how PNA has shifted towards incentive based and market based mechanisms; and
- 2) how this shift has affected the level of cooperation and enhanced fisheries regionalism in the Pacific?



New Institutional Economics (NIEs) Framework

Why?

- Economics, Political Science, Sociology and anthropology for collective action (Paavola, 2007)

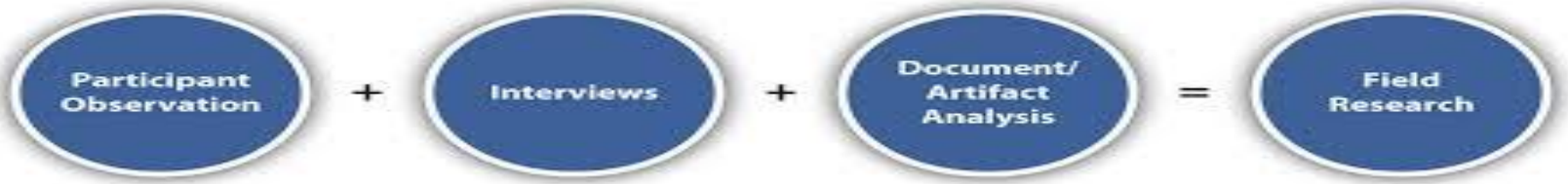
NIEs recognizes;

- Political aspirations, values, and motivations of agents.

NIEs complements:

- Regulatory framework, Command and Control and Ecosystem Approach

Data Collection



- Qualitative Analysis - Literature Review, Interviews and Observations
- Meetings Attended (Dec 2013 to March 2014)
 - 10th Regular meeting of the WCPFC
 - 3rd meeting of VDS and Scientific committee
 - 33rd meeting of the PNA
 - 19th Meeting of the Parties to the Palau Agmt.
 - 19th Meeting of the Parties to the FSM Agmt.

PNA response to PS Vessel Increase

- 1992 Federated State of Micronesia Arrangement (FSMA) – Domestic Investment and preferential arrangement
- 1994 Palau Agreement – set limit to 205 PS vessels (Input based Approach)



- By 2000 FSMA and Palau Agreement Failed to reduce PS fishing effort

WHY FAILED ? = Lack of Incentive, transparency, acceptance, lack of opportunities offered by DWFNs, lack of domestic infrastructure



Emergence of Vessel Day Scheme

- 2007 Vessel Day Scheme (VDS) was adopted to replace 205 vessel number under the Palau Agreement (Output based).
- Implemented from mid 2012
- Market and Incentive Mechanism
- Restrict fishing effort through Limited Days (PAEs)
- Purpose – To create competition for vessels – Increase benchmark Price, Eliminate inefficient vessels
- Long Term Objective – Improve fishing efficiency

Emergence of PNA MSC Certification

- 2011 PNA was granted MSC certification
- Market and incentive based and Output based approach.
- 2013 Chain of Custody and Eco-Label
 - PS Non-FAD/Free School
 - Target – Skipjack



Conceptual Framework

Complex
dynamic
political
interest



**Regionalism – RFMOs
(WCPFC, FFA, SPC, PNA)**



Complex
market
driven
principles

**Regulatory Regime
Based Approach
(Fisheries instruments
– LOSC, UNFSA, FAO
Compliance
Agreements, etc)**

1970s- 1980s

**Ineffective
cooperation**

Late 2000s

**Effective
cooperation**

**NIEs – Market and
Incentive Based
Approaches (VDS,
MSC and
ecolabelling)**

**OUTCOME:
Effective OR Ineffective
fisheries regionalism and
Cooperation for Sustainability**

Empirical Findings

Implications of VDS

- Parties acknowledged the economic benefits gained from VDS.
- Integration of tuna regimes – for consistency

Implications of MSC

- Parties are encouraged to support and participate in MSC.

Factors influencing Tuna Regimes

- **Regional Internal Pressures:**

- VDS Price, Power Struggle/ Relationship, Domestic development aspirations, Local political interest.

- **International External Pressures:**

- Market, Foreign debts, EU and US, Non-MSC Certification bodies

- **Regional Obligation and Private and NGOs**

WHAT NEXT?

- Analyse the effectiveness of VDS and MSC using game theoretical approach



- To what extent these tuna regimes influences cooperation level and fisheries regionalism in the Pacific.

