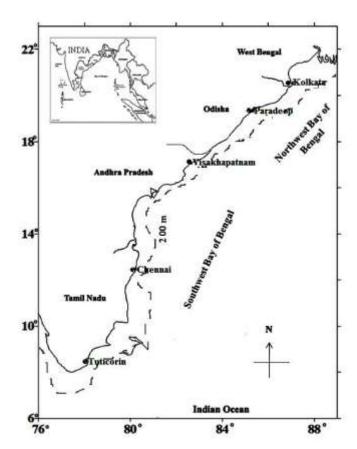
Trawl fishery of Western Bay of Bengal

(east coast of India)

E. Vivekanandan

Central Marine Fisheries Research Institute



1. Overcapacity

Increase in trawl fleet efficiency

Attribute	1961	2010	Increase
No. of trawlers	463	10,137	22 times
Mean hp	40	150	3.75 times
Total hp	18,520	1,520,550	82 times
Sea endurance (days)	1 - 2	5 - 10	
Mean depth (m)	20	70	

Recommended and existing number of trawlers

Sub- region	Recommended	Existing
NWBoB	3,000	2,894
SWBoB	5,500	7,423
Total	8,500	10,317

1. Overcapacity (management measures)

Control on addition of trawlers

Number of trawlers stabilized; but efficiency increased

Potential solution: Regulations on technical efficiency

2. Exploitation of spawners

Management measure

Fishing ban for 45 to 60 days during April - May every year

Effectiveness of management

- Protracted spawning; of 55 species, spawning of 21 to 30 species occurs every month
- Improvement in recruitment to fishery
- Has not helped reducing trawl effort or efficiency
- Long-term stock recovery not evident

3. Bycatch & Discard

Volume

17% LVB + ~ 20% Discard

Charismatic species not high



Management measure

Minimum mesh size & legal size-at-capture

Use of BRD



Poor compliance

Unwillingness to use

4. Habitat degradation

Biomass & biodiversity reduction;

Changes in nutrients & soil texture

No management measure in place now;

Regulating use of heavy & fast moving gear may be helpful

5. Species vulnerability

Issue

 Sharks & large species vulnerable (evidence: Vulnerability analysis)

Management

 Few species under Wildlife Protection Act

Effectiveness

Difficulty in product traceability

6. Ecosystem impacts

Issue

Fishing down food web @ 0.04 - 0.07 per decade

Management

Marine Protected Areas (27)

Effectiveness

- Small MPAs
- Communities do not endorse
- EAF not in place

7. Intra-sectoral conflicts

Issue

Conflict
between
mechanized
and artisanal
boats in
sharing
resources
and space

Management

Spatial restriction for mechanized boats; should not operate nearshore

Effectiveness

- Mechanized boats do not comply
- Voice concerns of bias
- Difficult to implement

8. Implementation of management plans

- Uncertainties
- > Resistance to regulations
- > MCS mechanism not in place fully

THANKS