

Development and Implementation of Responsible Fishing Technology - Learning from Our Experiences -



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1. Crisis of World Fisheries
2. What is Responsible Fisheries?
3. Case Studies

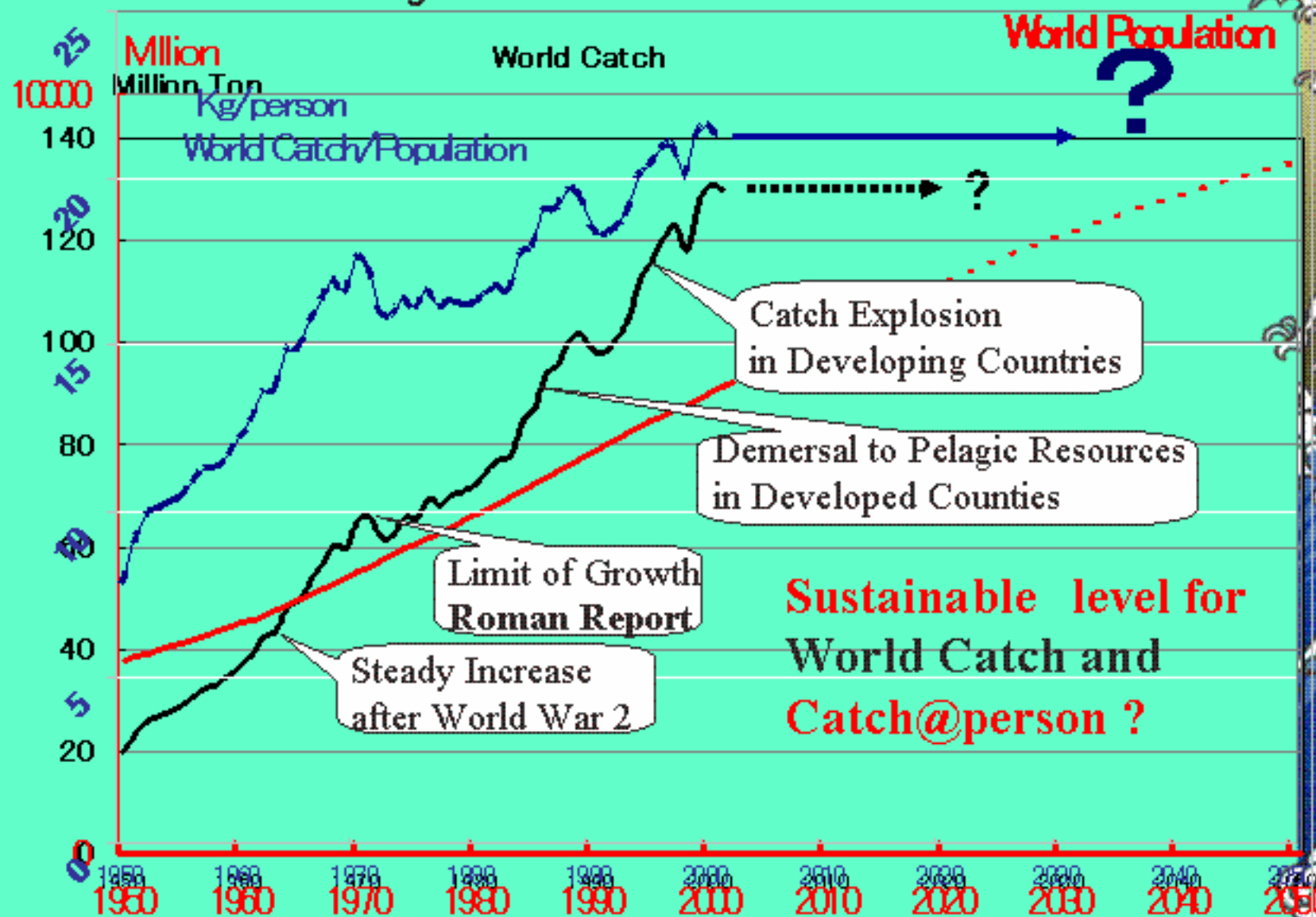
Trawl Fisheries, Light Fishing
Pot gear, and Set-net (Stationary Gear)

Assignment to you for attending the lecture course.....

- Please catch the meanings of each slide.
- Some slides contain website information. Please get the information by visiting the related website, if you can have an internet access.
- Some slides contain the questions for asking your preparation to answer.

Can we stop the population Explosion?

Can we increase the global catch amount?



Can we increase the global catch / person?

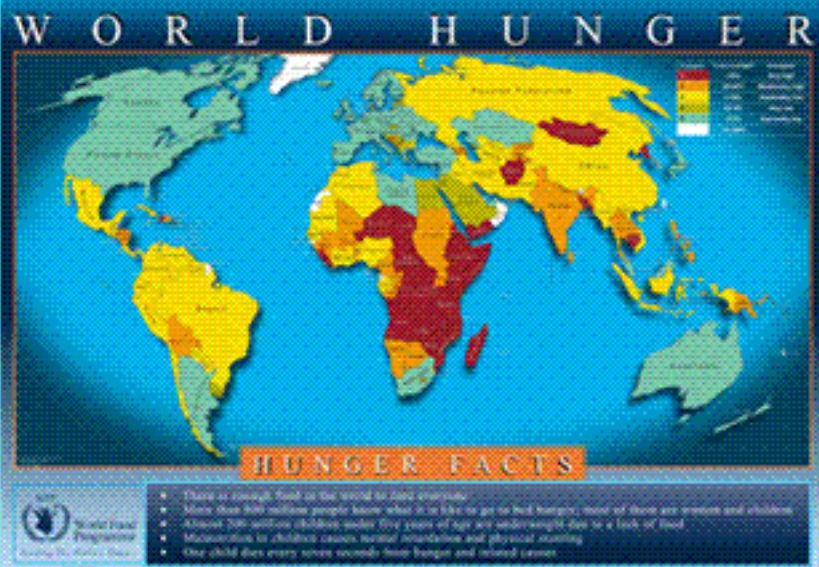
Year

LDC criteria

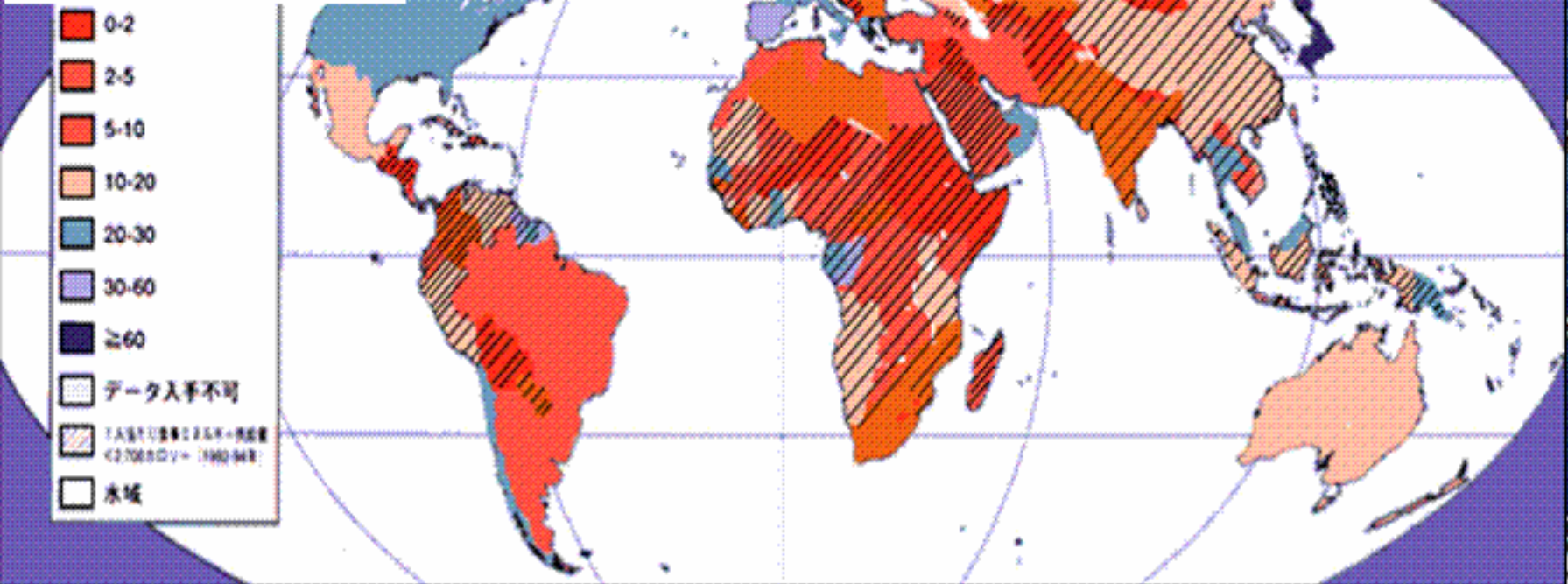
- 1) Income → ?
- 2) Human Resources → ?
- 3) Economy → ?

The LDCs: 49 States, 10.7% of the world population, 0.5% of the world GNP





**Fish Consumption
in 1991-1993
as Kg/Person**



Perspectives in Fisheries & Fisheries Sciences

- 1995 Kyoto Declaration - Sustainable contribution of fisheries to Food Security
- 1996 World Fisheries Congress in Australia
- 1997 SEAFDEC- Regional Workshop on Responsible Fishing
- 1998 Asian Fisheries Forum in Thailand
- 2000 World Fisheries Congress in Beijing
- 2001 International Symposium in Japan
SEAFDEC Millennium Conference
Asian Fisheries Forum in Taiwan
- 2003 SEAFDEC Tokyo Seminar
- 2004 World Fisheries Congress in Canada
- 2008 World Fisheries Congress in Yokohama

1950
4.4 Billion
2000
6.0 Billion
2050
9.3 Billion

- ### United Nations
- 1972 Whaling Ban
 - 1991 High Sea Gillnet Ban
 - 1992 Rio Earth Summit
- Agenda 21 for Bio-Diversity
 - 1995 FAO Responsible Fisheries
 - 1997 Kyoto Protocol for
Global Warming Issue
 - 2002 Johannesburg Summit - Rio+10
- Global Challenge
Global Opportunity
- Trends in Sustainable Development

Population Explosion

Regional Unbalancing

Food Supply

Global Environmental Conservation

- Energy/Labor Saving
- Reducing Fishing Impact
- Conservation Harvesting
- HACCP: Healthy Seafood
- Global Marketing

Sustainable Development

What can be the solution, and way of actions?



WELCOME TO THE CODE OF CONDUCT FOR **RESPONSIBLE FISHERIES** WEBSITE

Please visit the FAO website for information.....
http://www.fao.org/fi/website/FIRetrieveAction.do?dom=org&xml=CCRF_prog.xml&xp_nav=1

**"The right to fish carries with it
the obligation to do so in a **responsible manner**
so as to ensure **effective conservation and management**
of the living aquatic resources."**

- **When have you got the idea on Responsible Fisheries?**
 - 1995~ '99, before coming to Japan, in this Course.....?
- **How did you feel on this concept, for the first time?**
 - Understandable? Acceptable?, or Happy with this?
- **How much do you know on Responsible Fisheries?**

What is the Code of Conduct for Responsible Fisheries?

Please visit and get it!

<http://www.fao.org/docrep/003/x9066e/x9066e00.htm>

What is the Code of Conduct for Responsible Fisheries?

Background

Fisheries Management

Flag Countries

Port Countries

Aquaculture Development

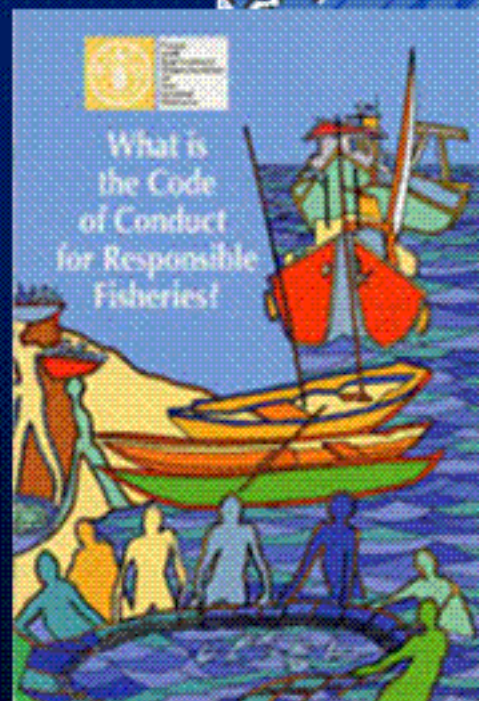
Integration of Fisheries into Coastal Area Management

Post-harvest Practices and Trade Responsibilities

Fisheries Research

Regional and International Cooperation

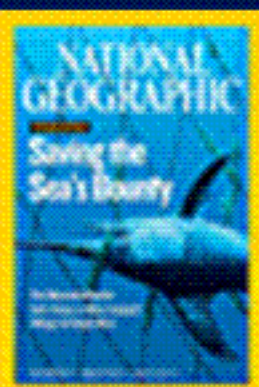
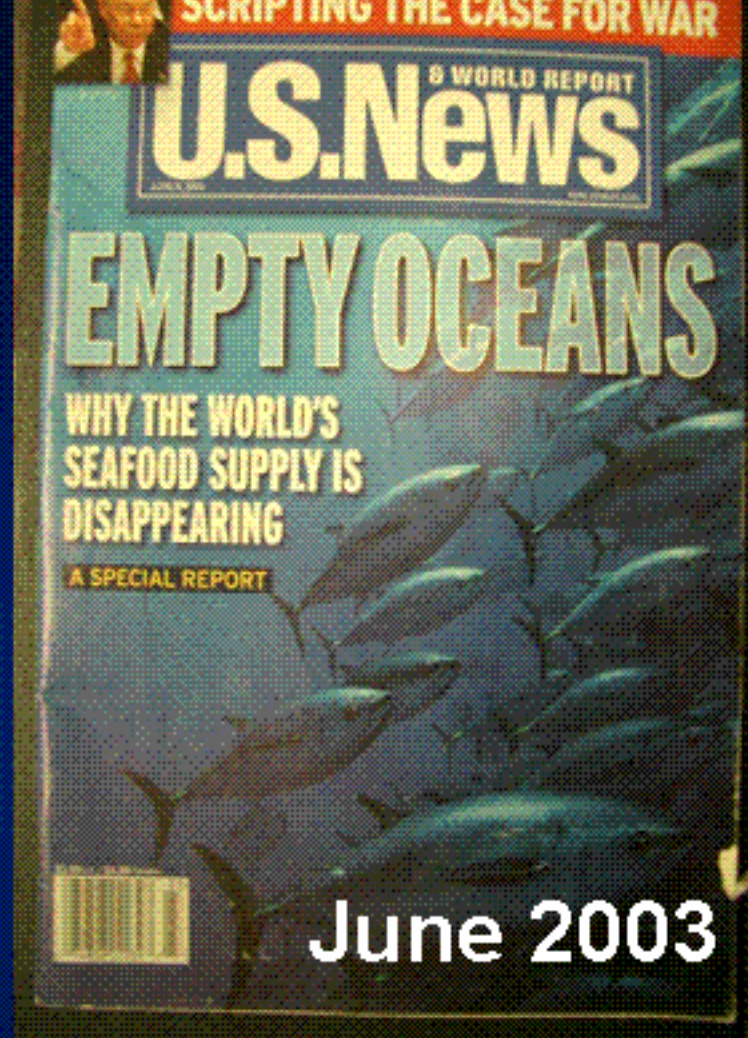
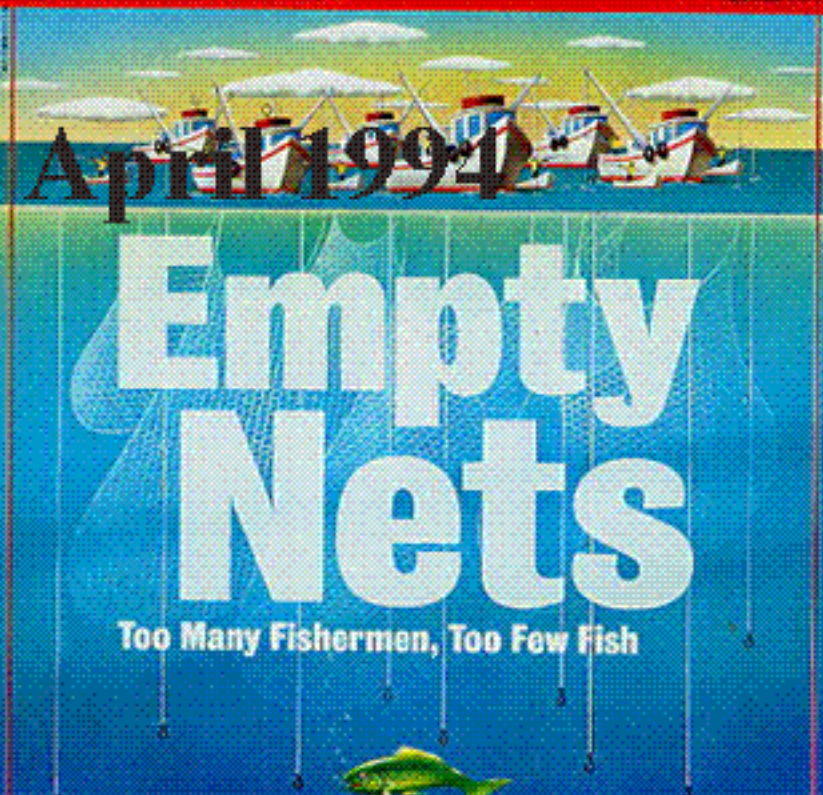
What does all this mean?



AMERICA ABROAD: THE PERILS OF PEACEKEEPING

Newsweek

THE INTERNATIONAL NEWSMAGAZINE



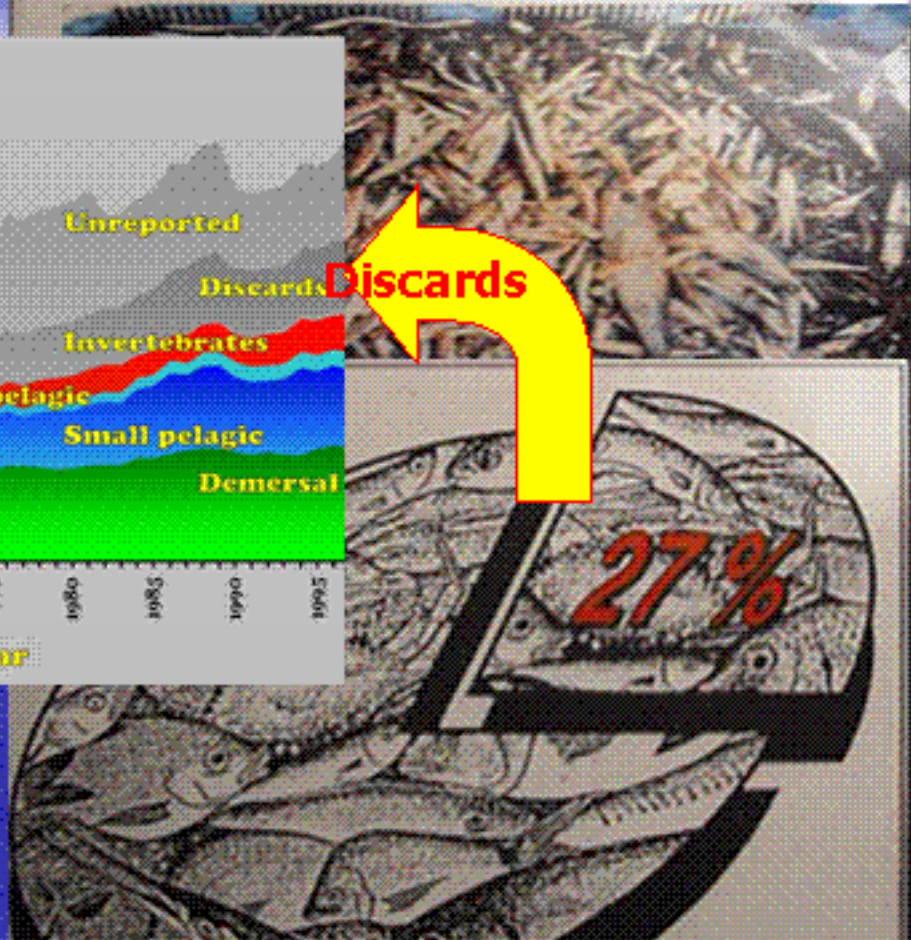
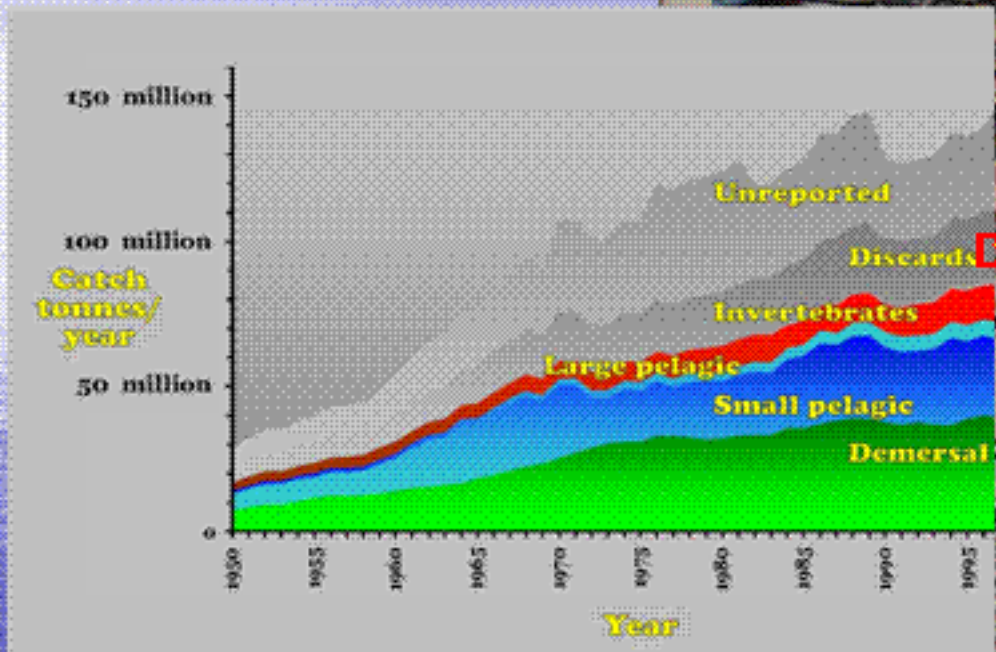
Please visit the website for learning the latest issue of National Geographic
<http://www7.nationalgeographic.com/ngm/0704/feature1/>

Please visit and enjoy the following website to learn more....
http://www7.nationalgeographic.com/ngm/0704/sights_n_sounds/index.html

A global assessment of fisheries bycatch and discards

2012/2013
FAO
FISHERIES
TECHNICAL
PAPER
339

1994
by Alverson
and *et al.*



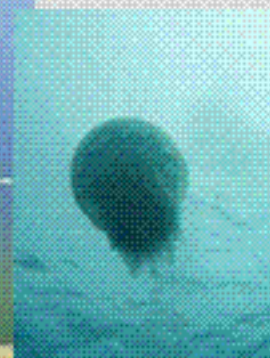
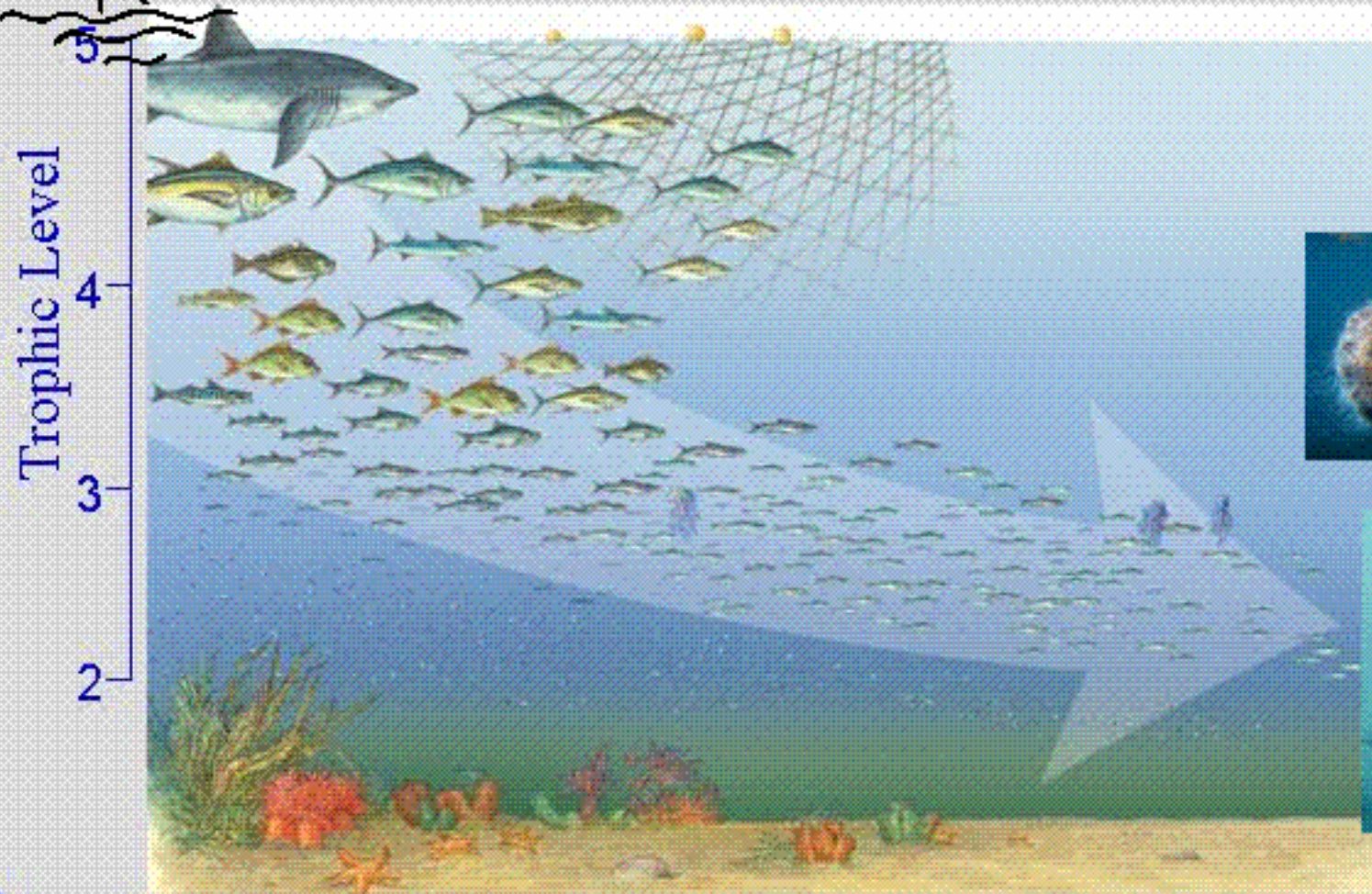
How do you think of this wasting ?

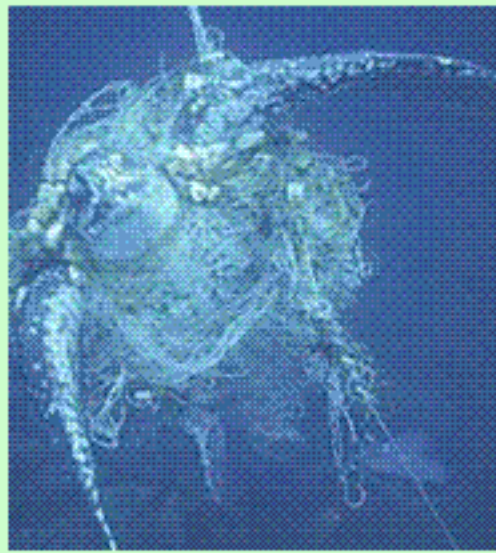
Questions.....???

- What are the discards? Why it happens?
- What are the by-catch? Why it happens?
- What are the solutions to reduce the by-catch and discards?

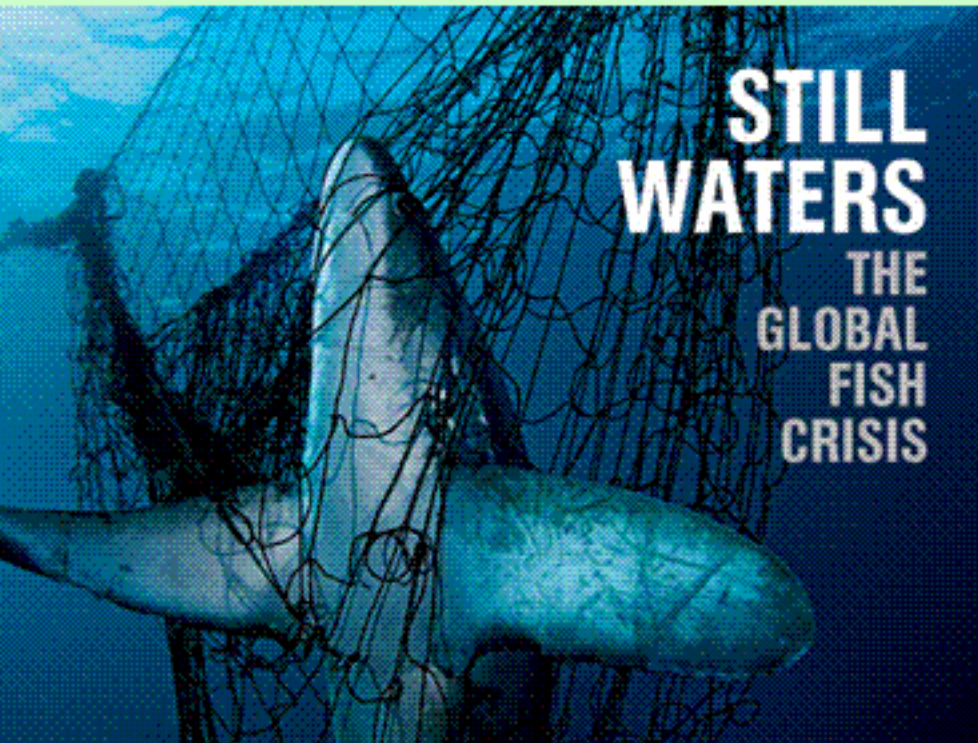
Higher to Lower Trophic Level for Catch

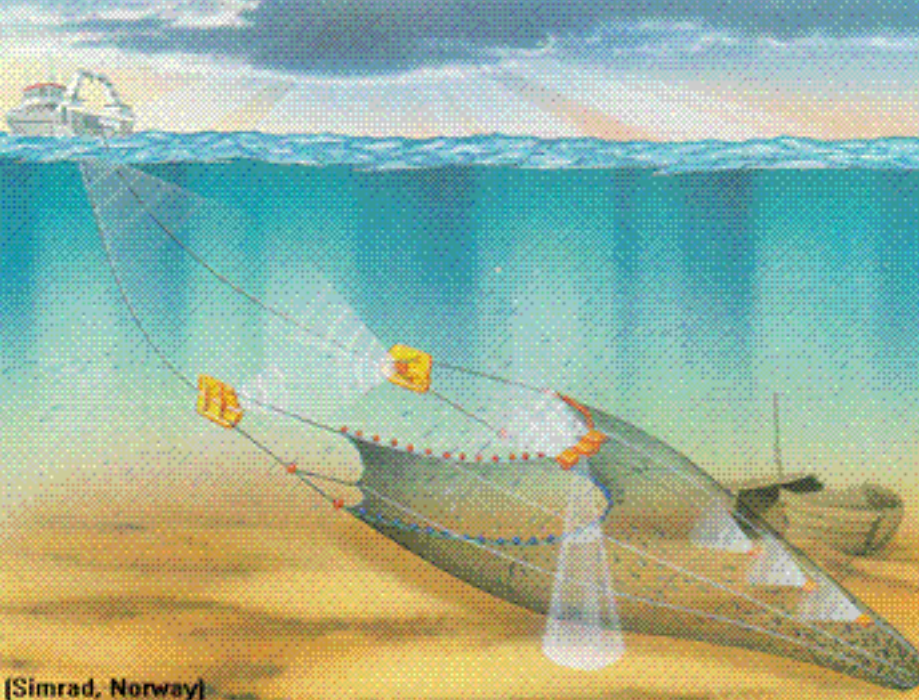
and....., Farming Up with Aquaculture



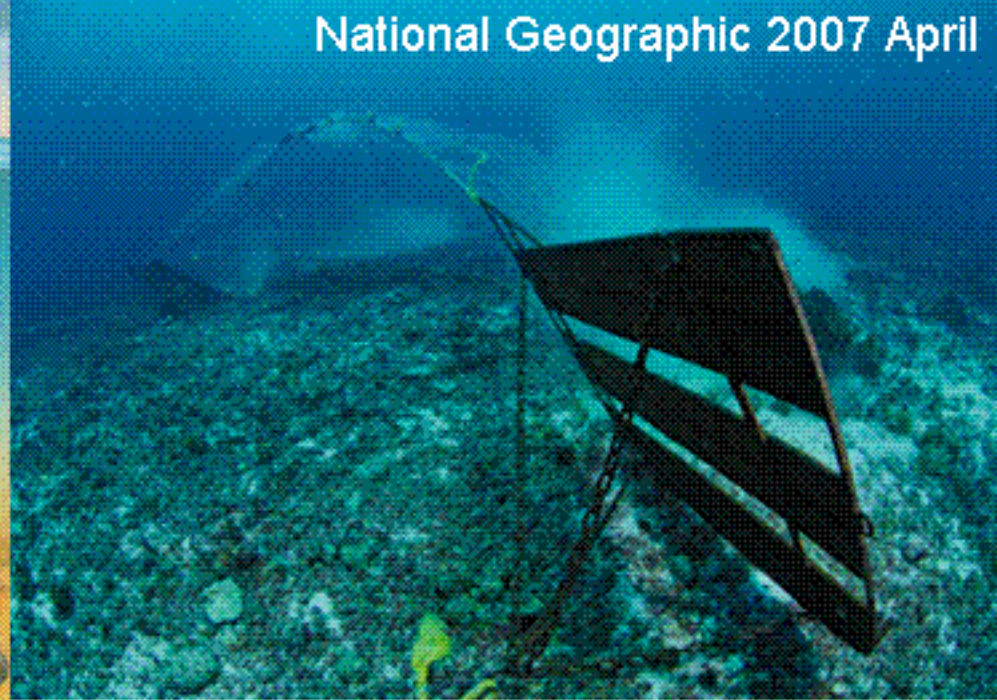


What are the problem on these photos?

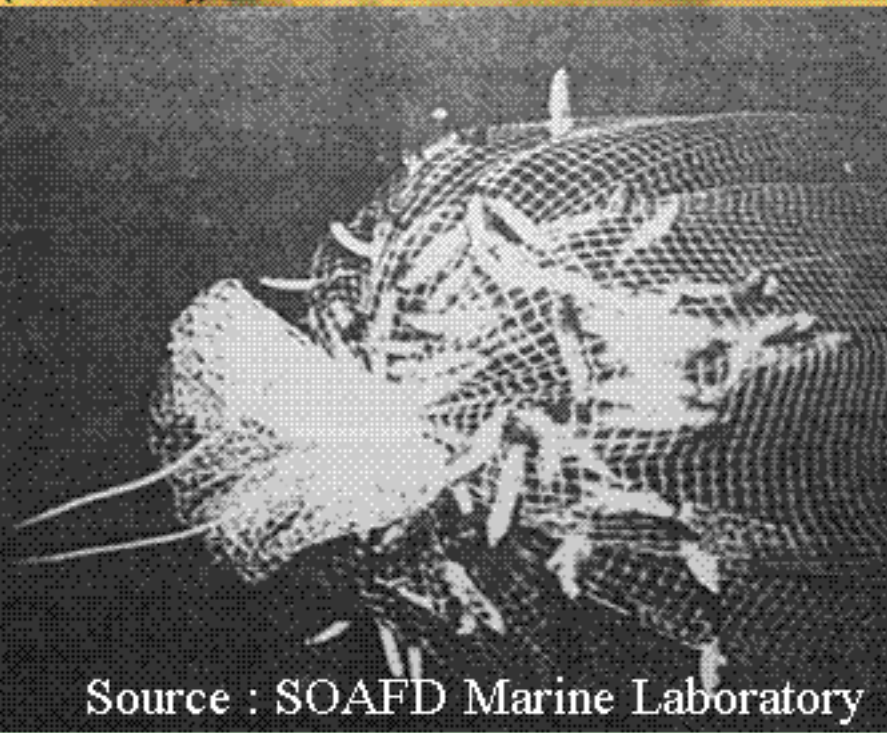




[Simrad, Norway]



**Please identify the problems on trawl.
What can be the solutions?**



Source : SOAFD Marine Laboratory



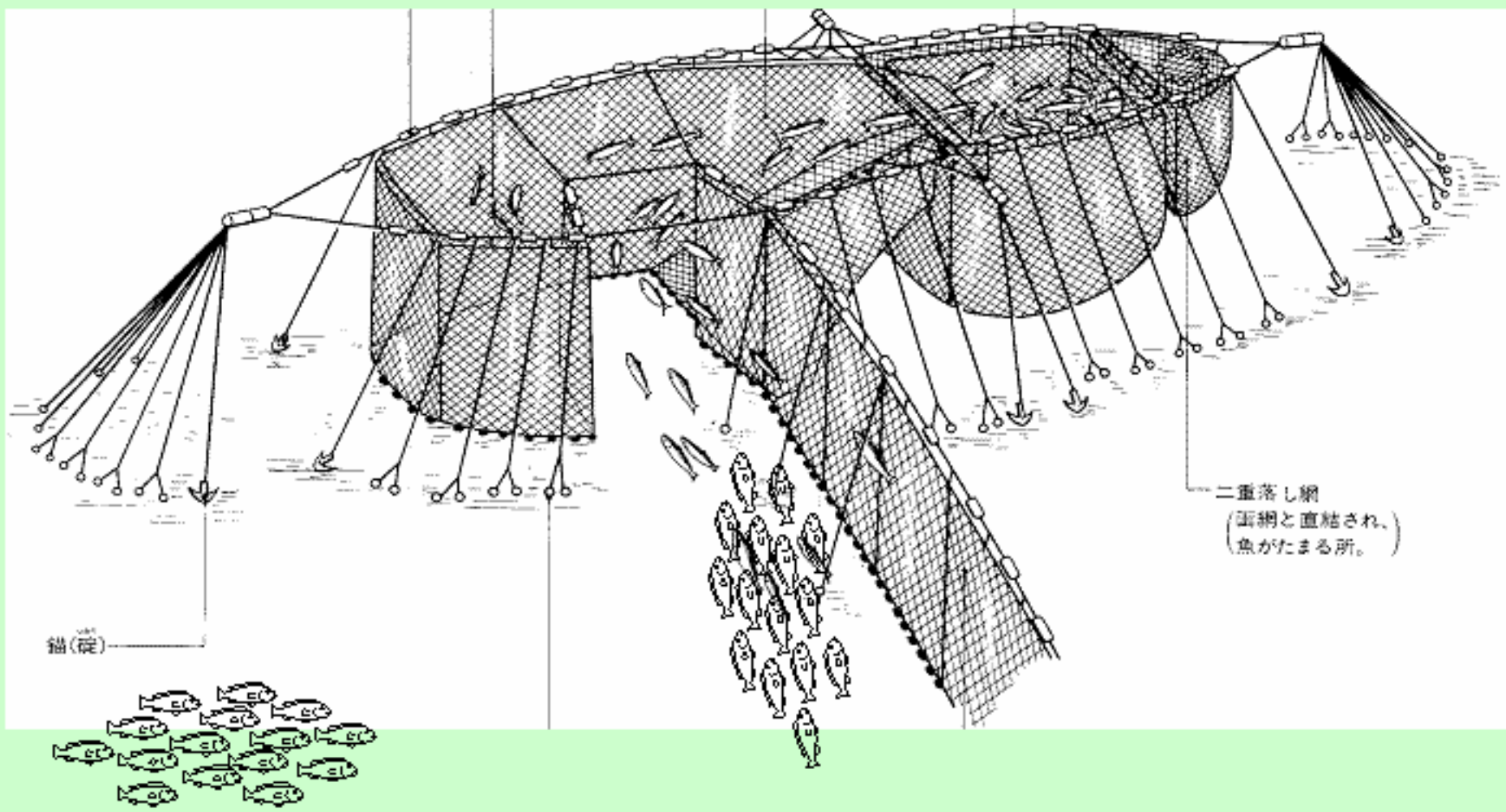
Can you guess
what this photo means?



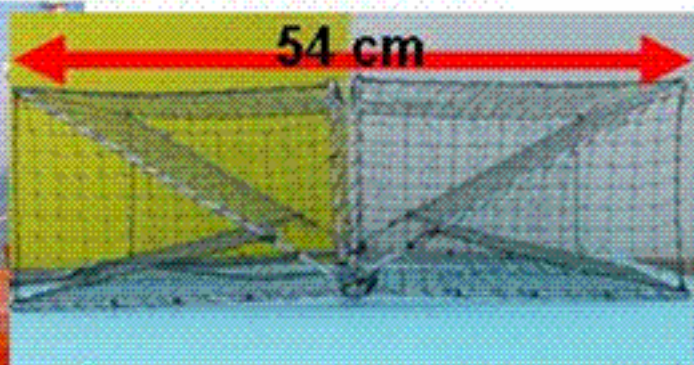
From Fishing News International January 1994

What kind of fishing with light in your country?

Please identify the capture process of this gear.
Please prepare yourself on stationary gear in your country.

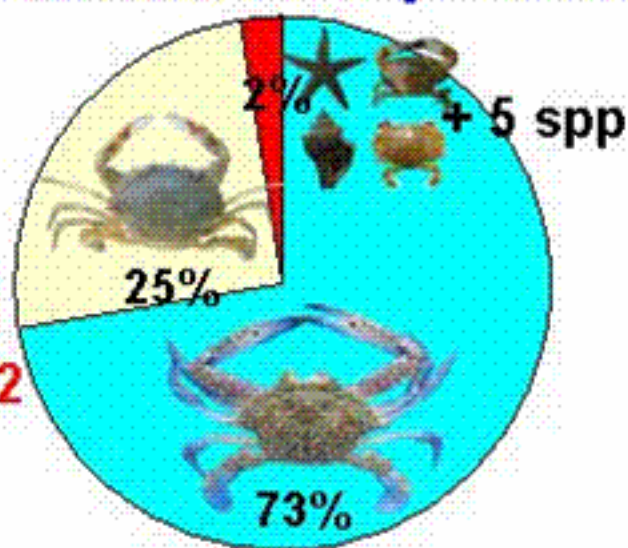


Please identify the problems for pot gear.
 What can be the solutions...?



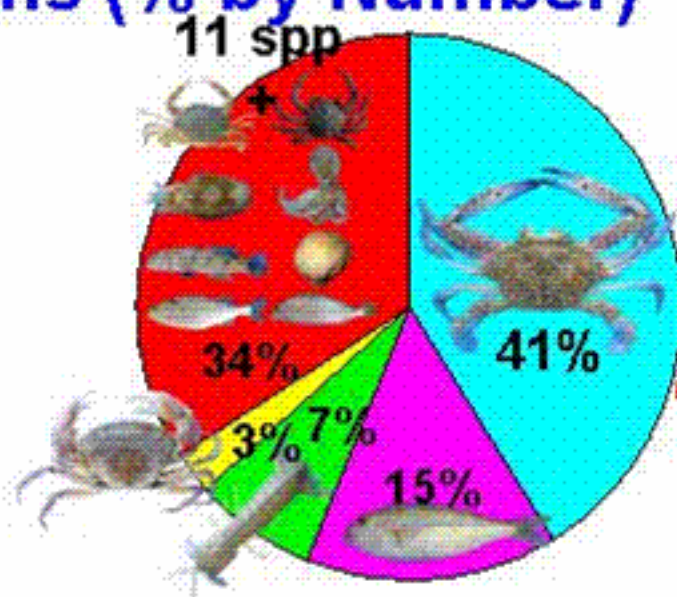
Catch compositions (% by Number)

Dec 06
 (N = 1,536)
 CPUE = 3.02



Small scale

May 06
 (N = 1,384)
 CPUE = 0.27



Commercial scale



SMART
THE INTERNATIONAL



GEAR
COMPETITION

<http://www.worldwildlife.org/oceans/projects/smartgear.cfm>

- **How to minimize the Negative Impact of Capture Fisheries**
- WWF and our partners created the International Smart Gear Competition to inspire innovative, practical, cost-effective ideas that allow fishermen to "fish smarter" - to better target their intended catch while reducing bycatch.
- The competition is open to all - fishermen, professional gear manufacturers, teachers, students, engineers, scientists and backyard inventors



MSC

Marine Stewardship Council