



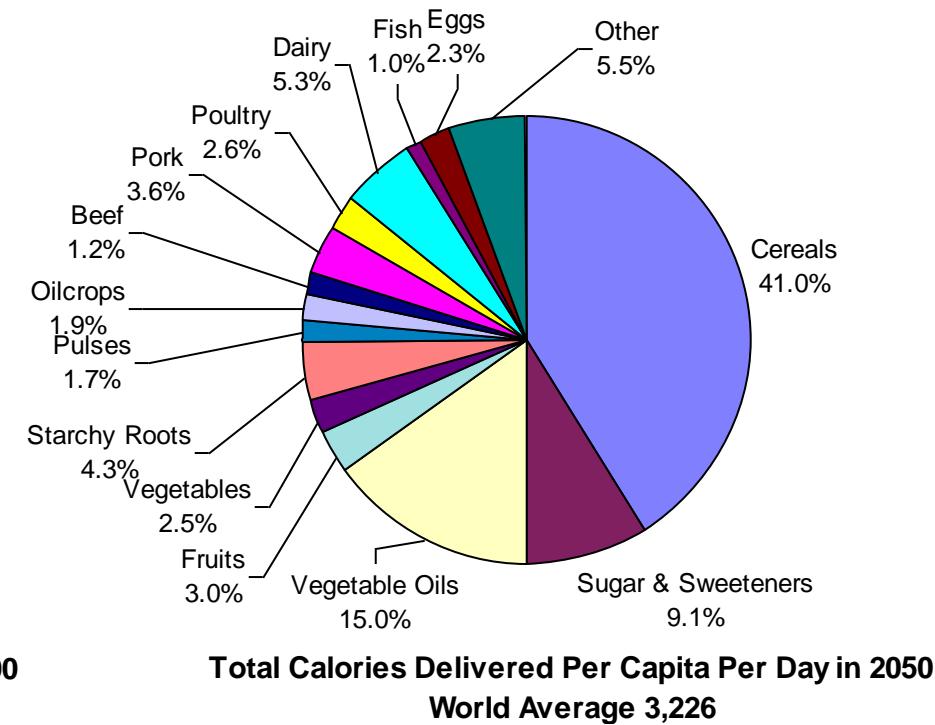
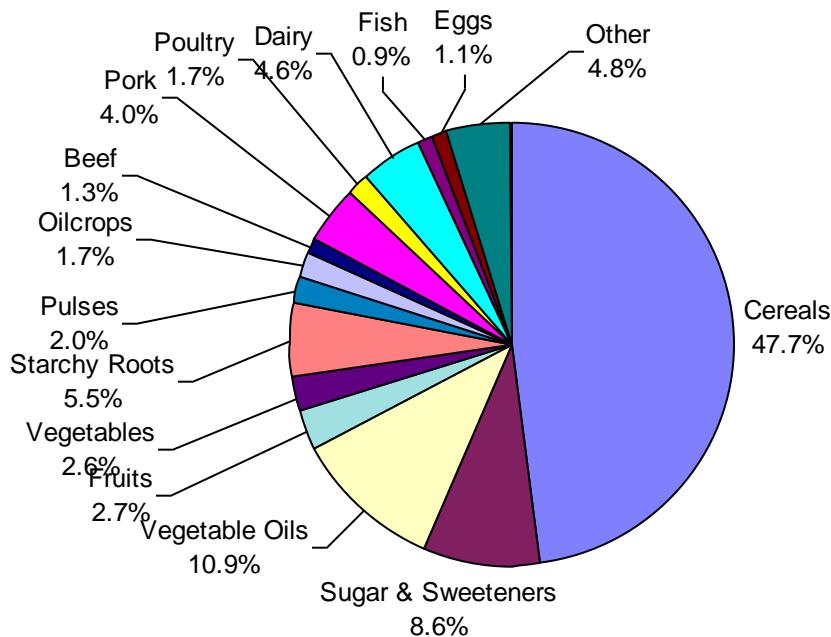
# Global Seafood Fisheries & Aquaculture

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**Jason Clay**  
**SVP, WWF-US**  
**2 May 2011**

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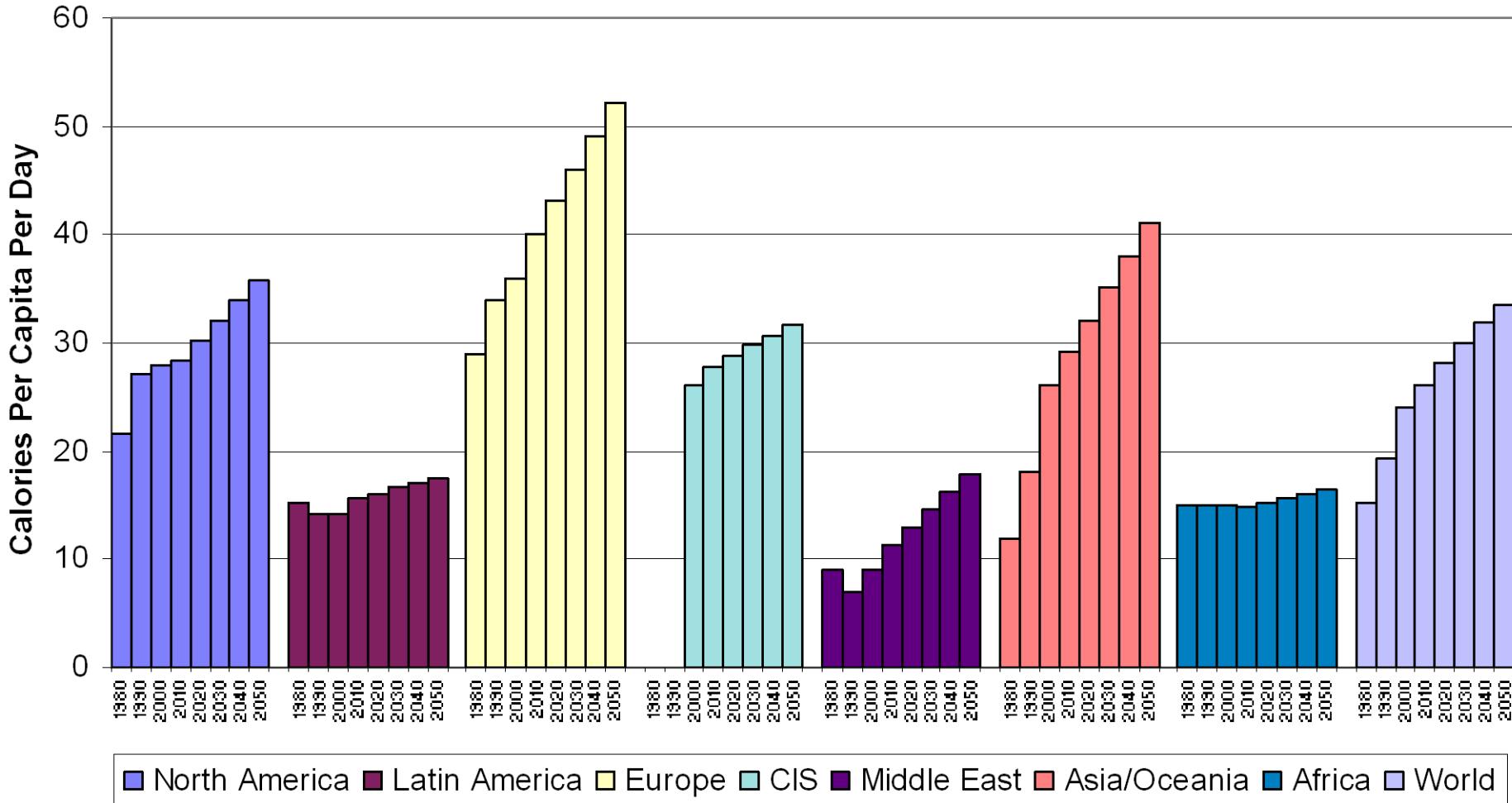
# World Projected Caloric Distribution Change



Source: Calories in 2000 as reported by the Food and Agricultural Organization of the United Nations

# Fish and Seafood Kilocalories Delivered by Region

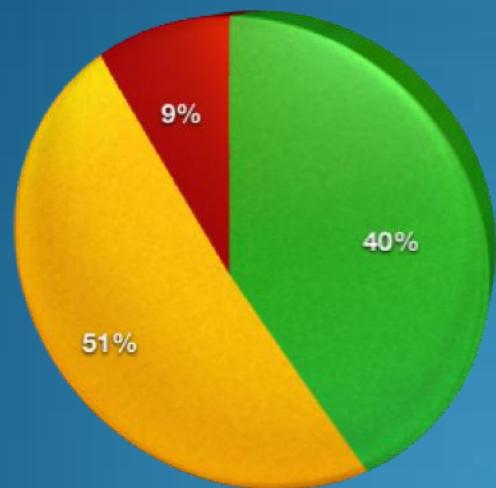
Share of World Consumption in 2050 is 1%



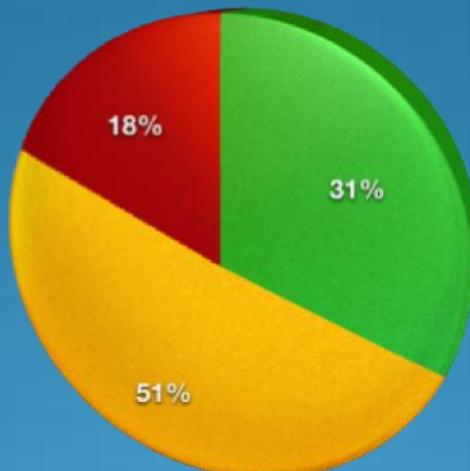


# Status of Global Marine Fisheries

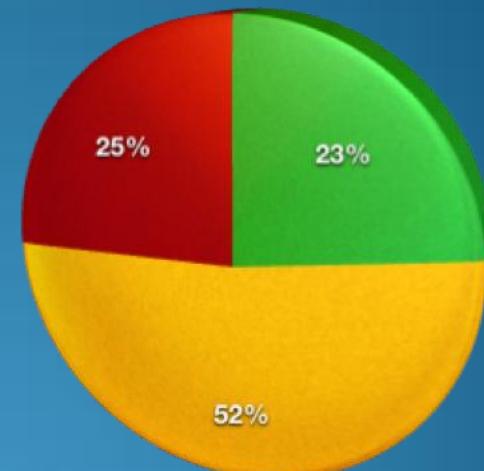
1974



1990



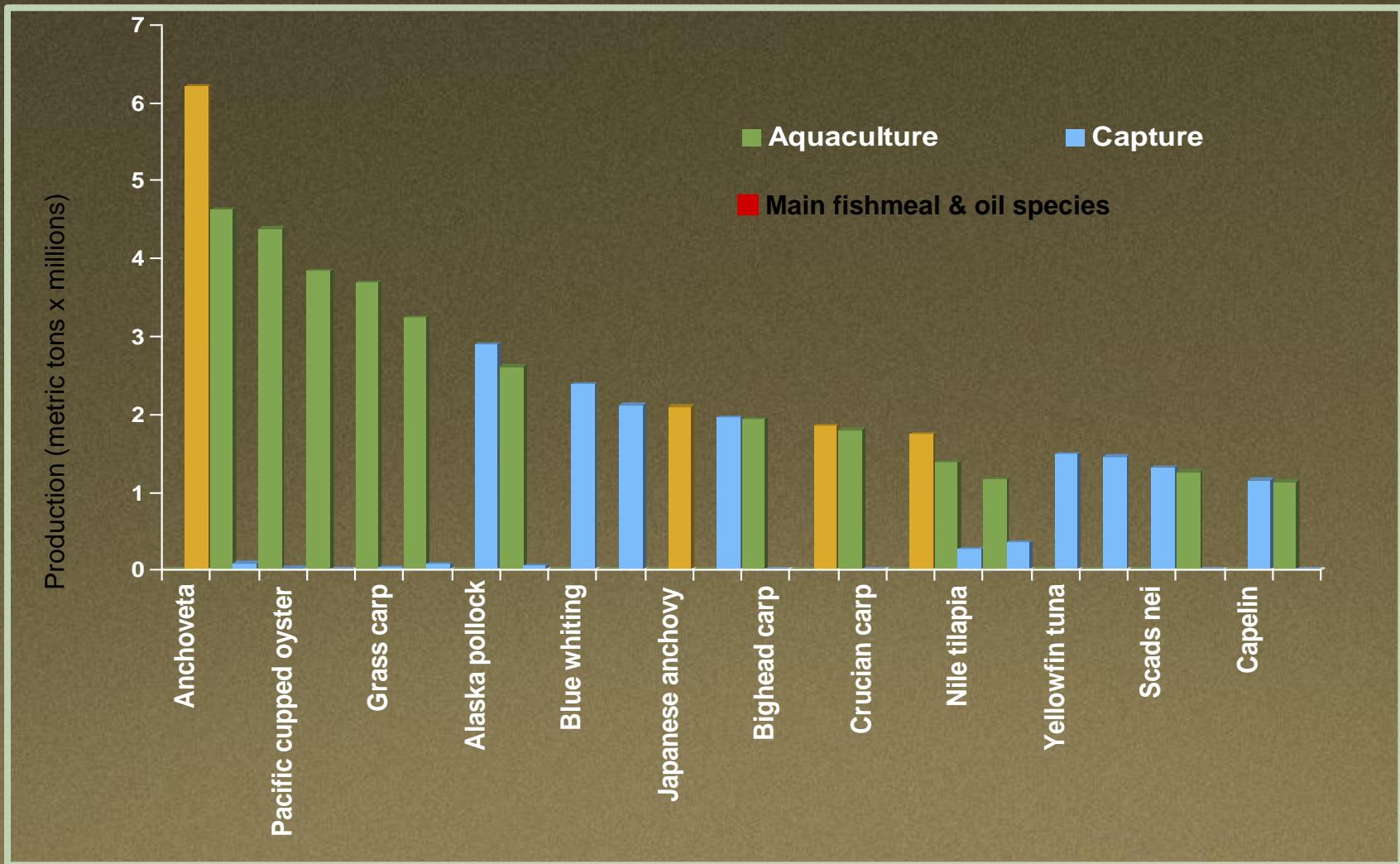
2006



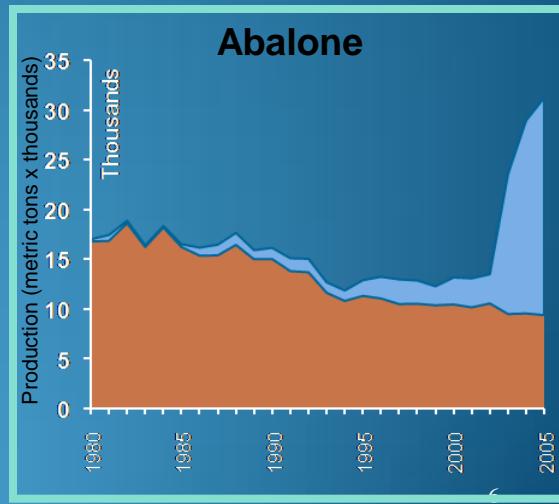
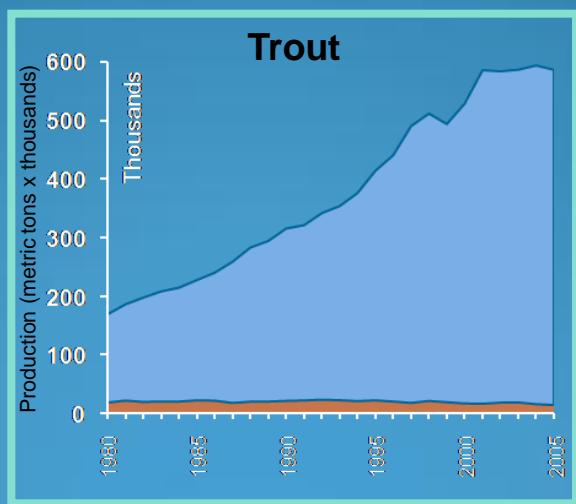
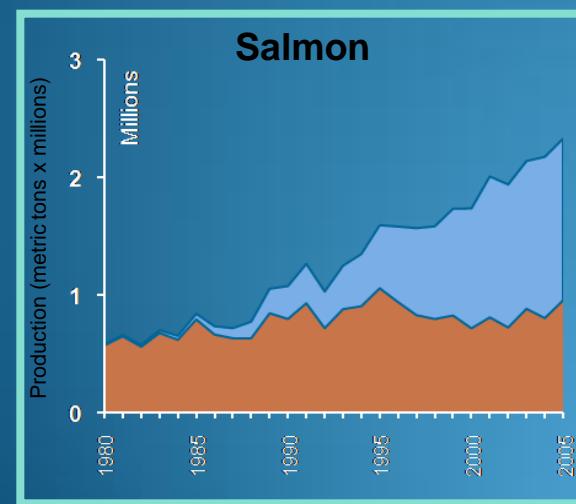
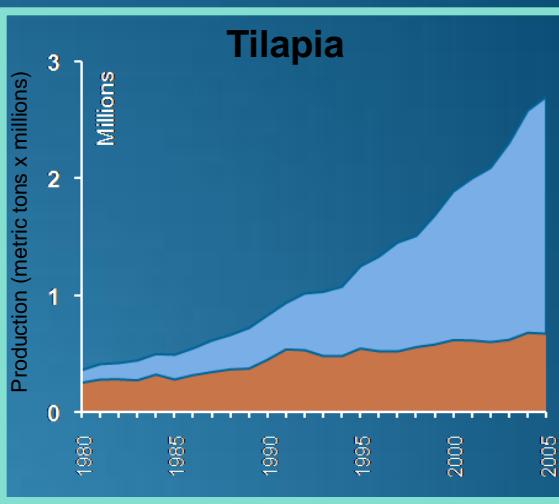
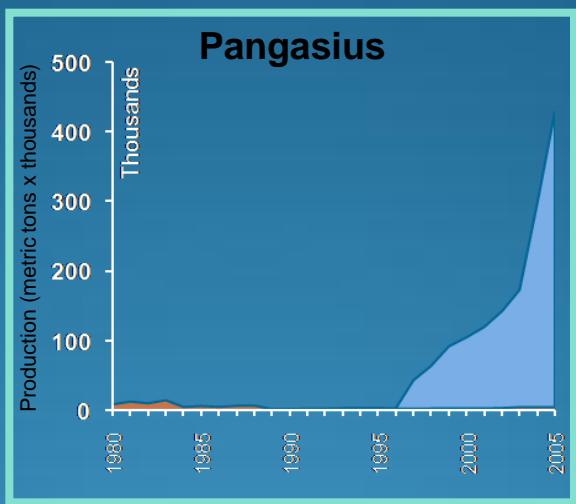
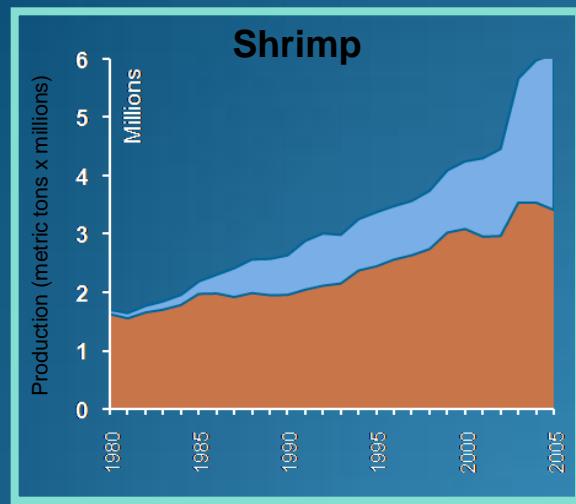
- Underexploited
- Fully Exploited
- Overexploited

Source: FAO (2008)

# Top 24 Species Produced Globally



# Aquaculture vs. Capture—By Species

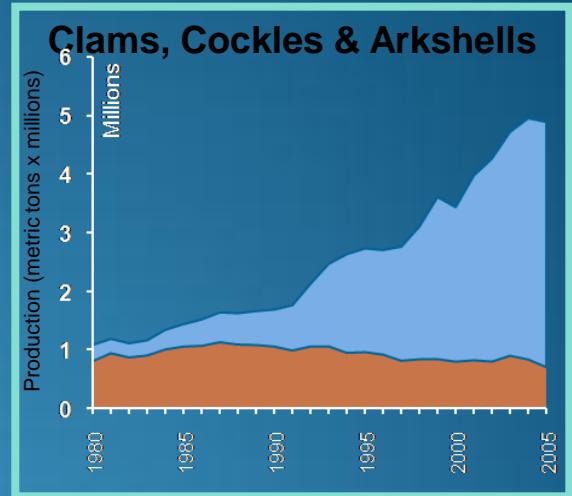
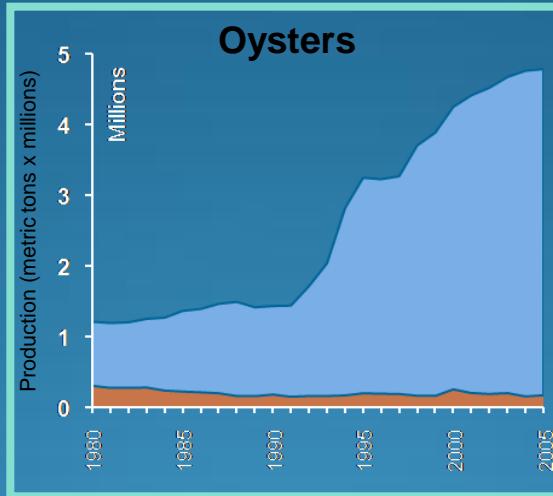
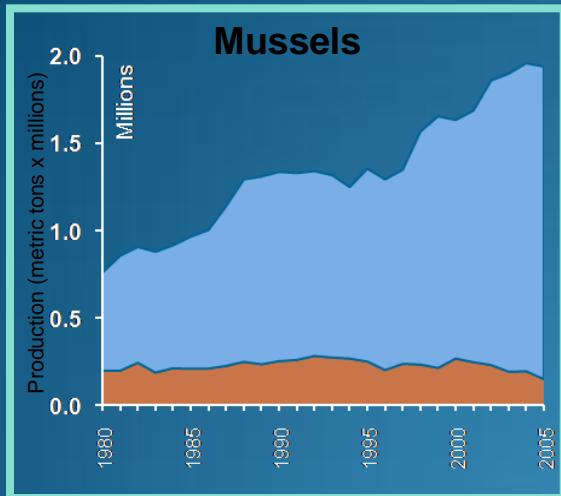


■ Aquaculture

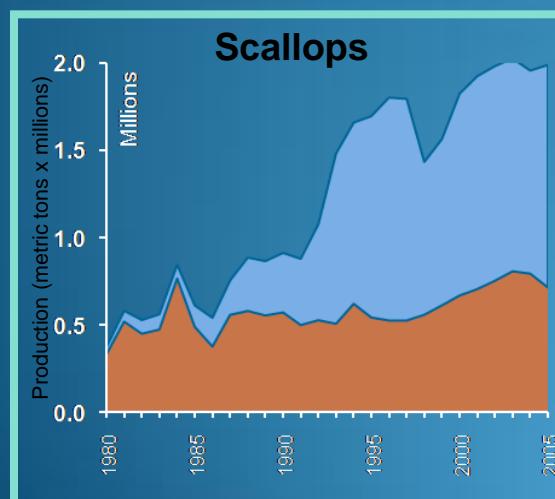
■ Capture

Source: FAO FishStat – Aquaculture Production: Quantities 1950-2005 and Capture Production: 1950-2005

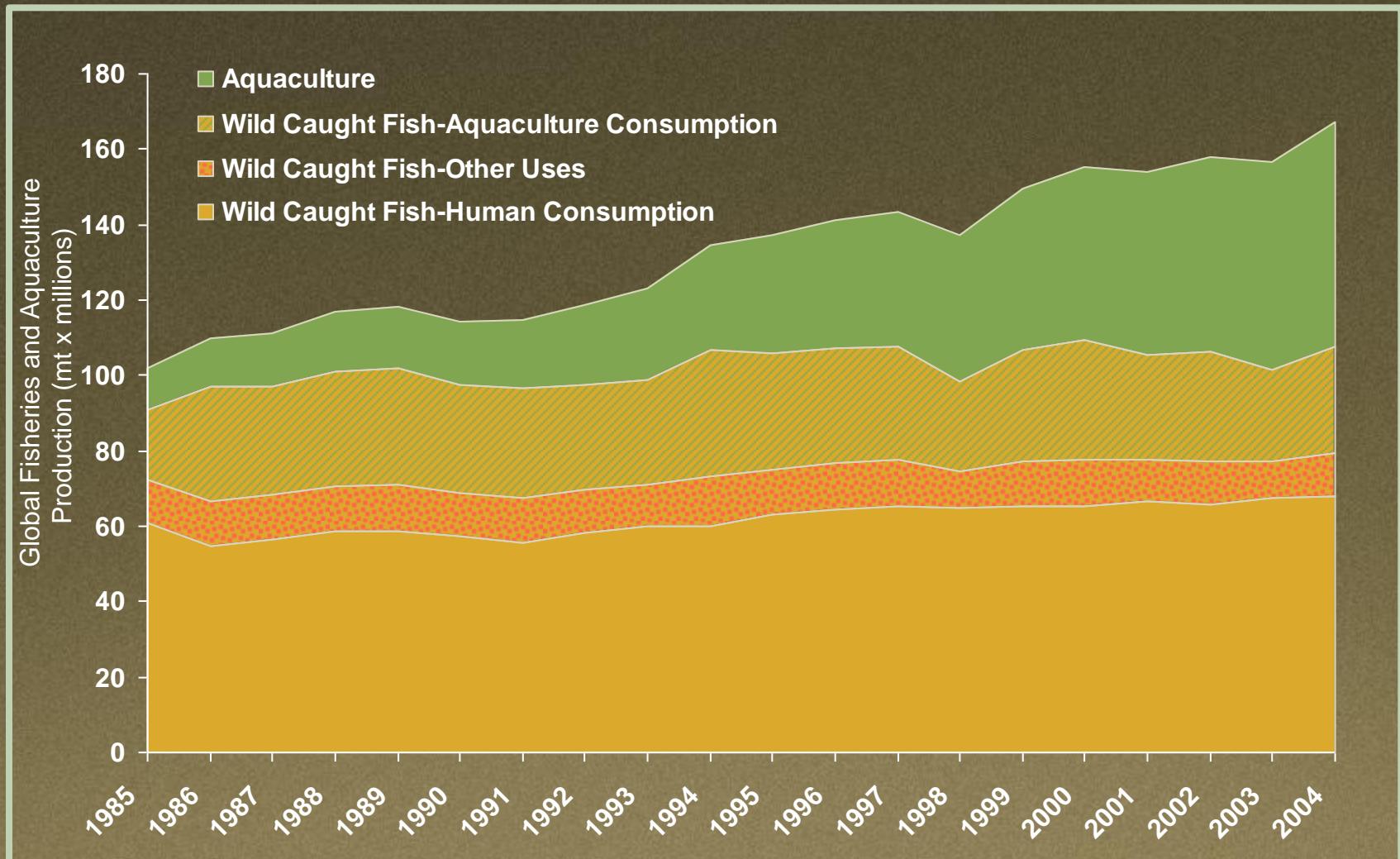
# Aquaculture vs. Capture – By Species



□ Aquaculture      ■ Capture

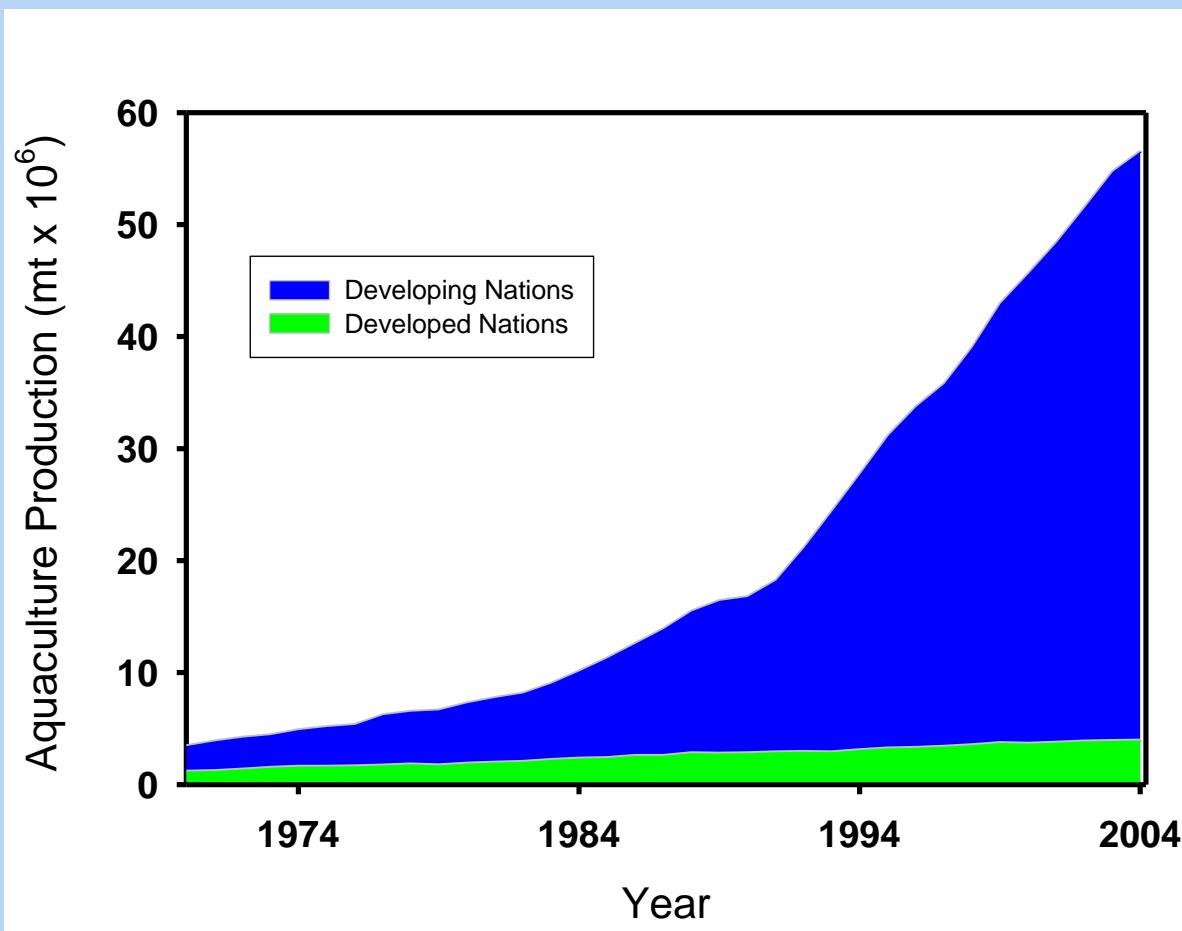


# Aquaculture Versus Capture Fisheries

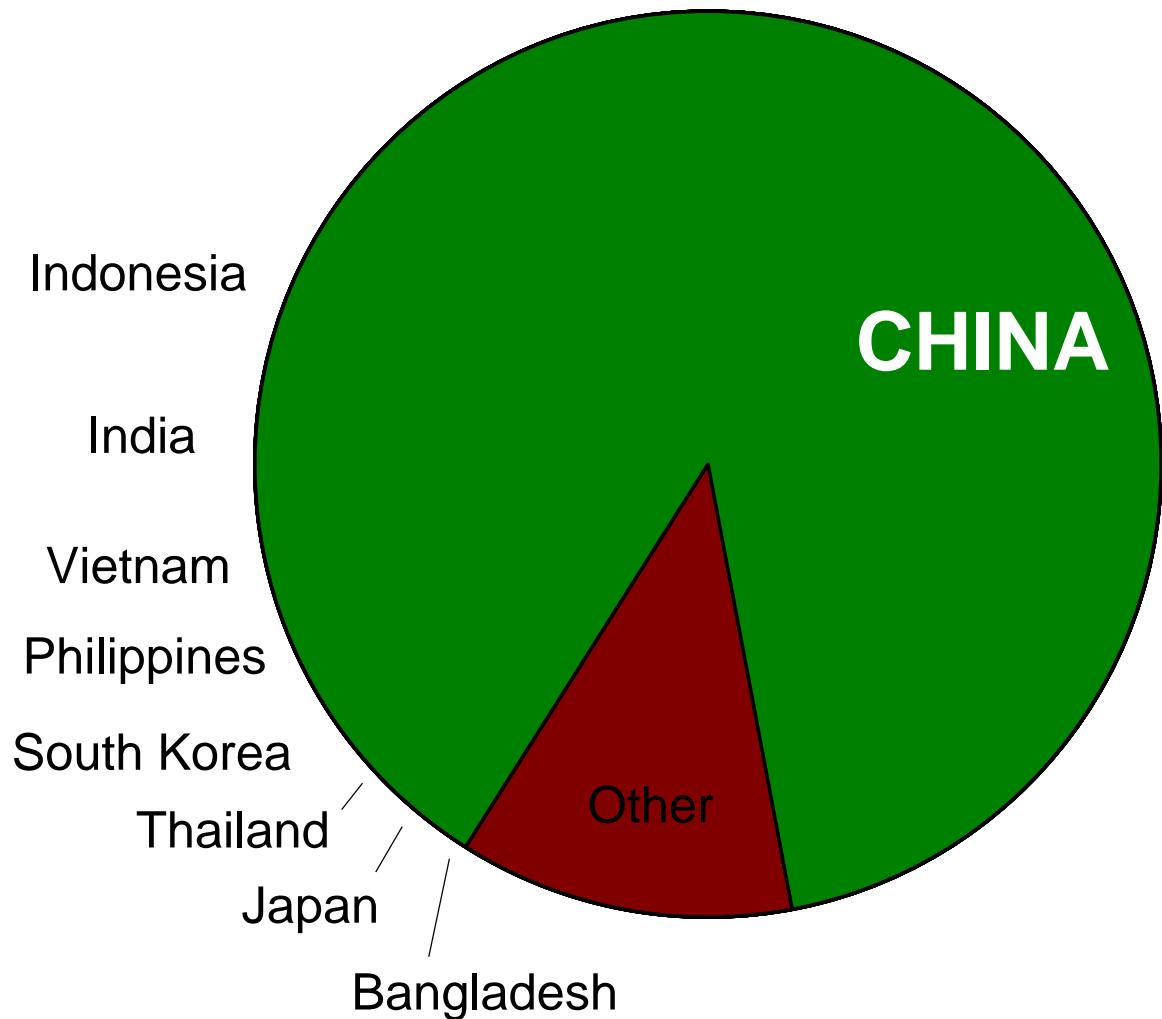


# Global Aquaculture Production

## Developed vs. Developing Nations



# China's Share of Global Aquaculture



2008 Aquaculture Production Volumes (mt x 10 <sup>6</sup> )	
China	42.67
Indonesia	3.85
India	3.48
Viet Nam	2.50
Philippines	2.41
South Korea	1.39
Thailand	1.37
Japan	1.19
Bangladesh	1.01
Other	8.13

# And then there is China

Largest global player in all seafood (36%)

1.5 million jobs

1/3 of all animal protein is from seafood

More carp than poultry

Processes some 50% of all white fish globally

Reprocessed white fish can also include IUU fish

Accounts for up to 1/3 of all forage fish and other fish meal and oil sources



# Global marine fisheries catch & assessments

## Worm *et al* (2009)

**Fig. 1.** Data sources used to evaluate global fisheries. (A) Global catch data; colors refer to the natural logarithm of the average reported catch (metric ton  $\text{km}^{-2} \text{year}^{-1}$ ) from 1950 to 2004. (B) Other data: Stock assessments quantify the status of exploited populations; research trawl surveys are used to estimate fish community trends; ecosystem models are used to assess responses to fishing. Ecosystems that were analyzed in some detail are highlighted in green (not overfished), yellow (low exploitation rate, biomass rebuilding from overfishing), orange (low to moderate exploitation rate, not yet rebuilding), or red (high exploitation rate).

