

# Implementation of the BOBLME Project in India

## Country Report

# Global Vs. Indian Fisheries Scenario

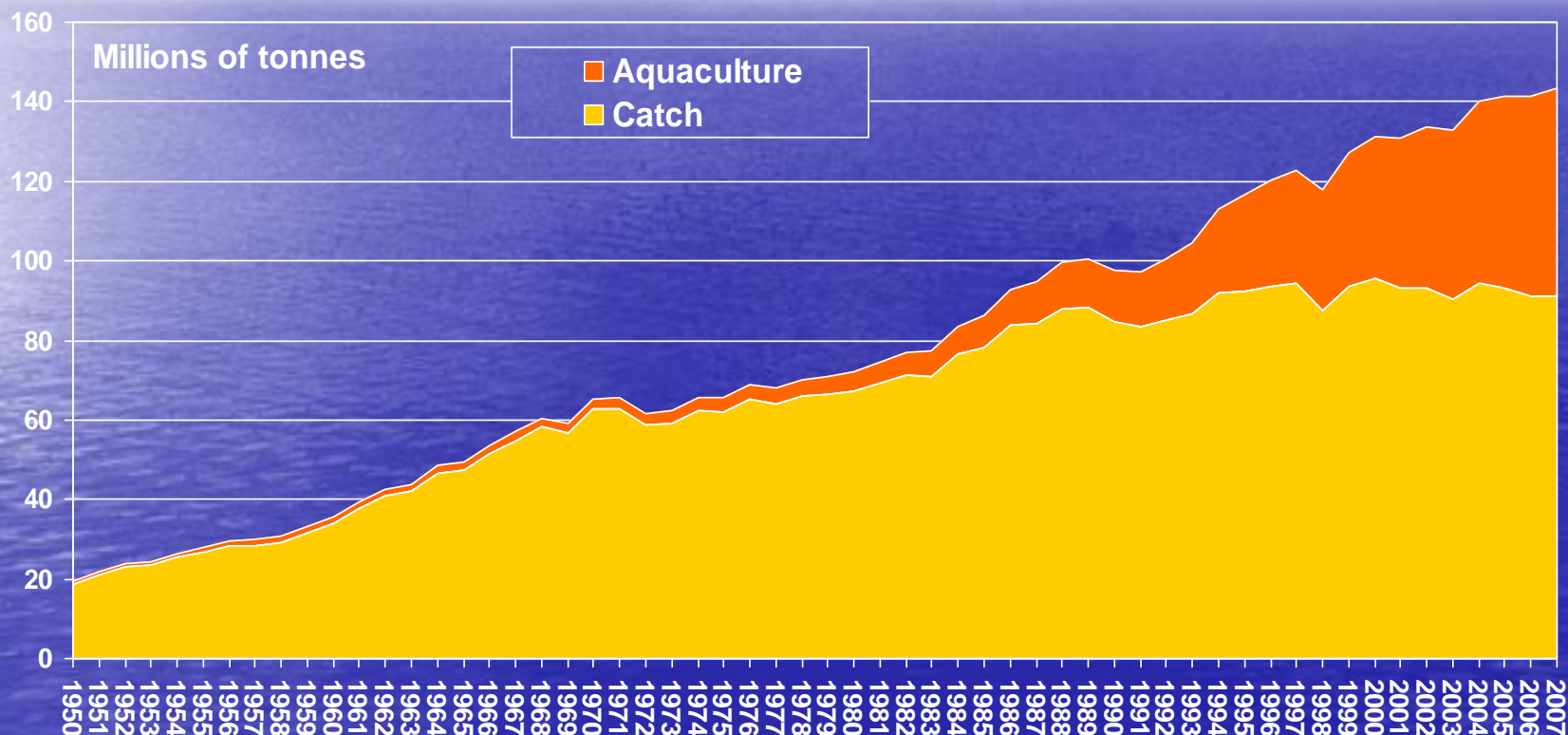
## Global Production

	Quantity (million tonnes)	% Share
Total Fisheries (2005)	141.6	100
Marine Capture Production	84.2	59.5
Inland Capture Production	9.2	6.5
Inland Aquaculture	28.9	20.5
Mariculture	18.9	13.5

## Indian Production (2007-08)

Total Fisheries	7.13	100
Marine	2.91	40.9
Inland	4.22	59.1

# World Fish Production



FISHSTAT 2007/FIU estimates

10/Nov/2009



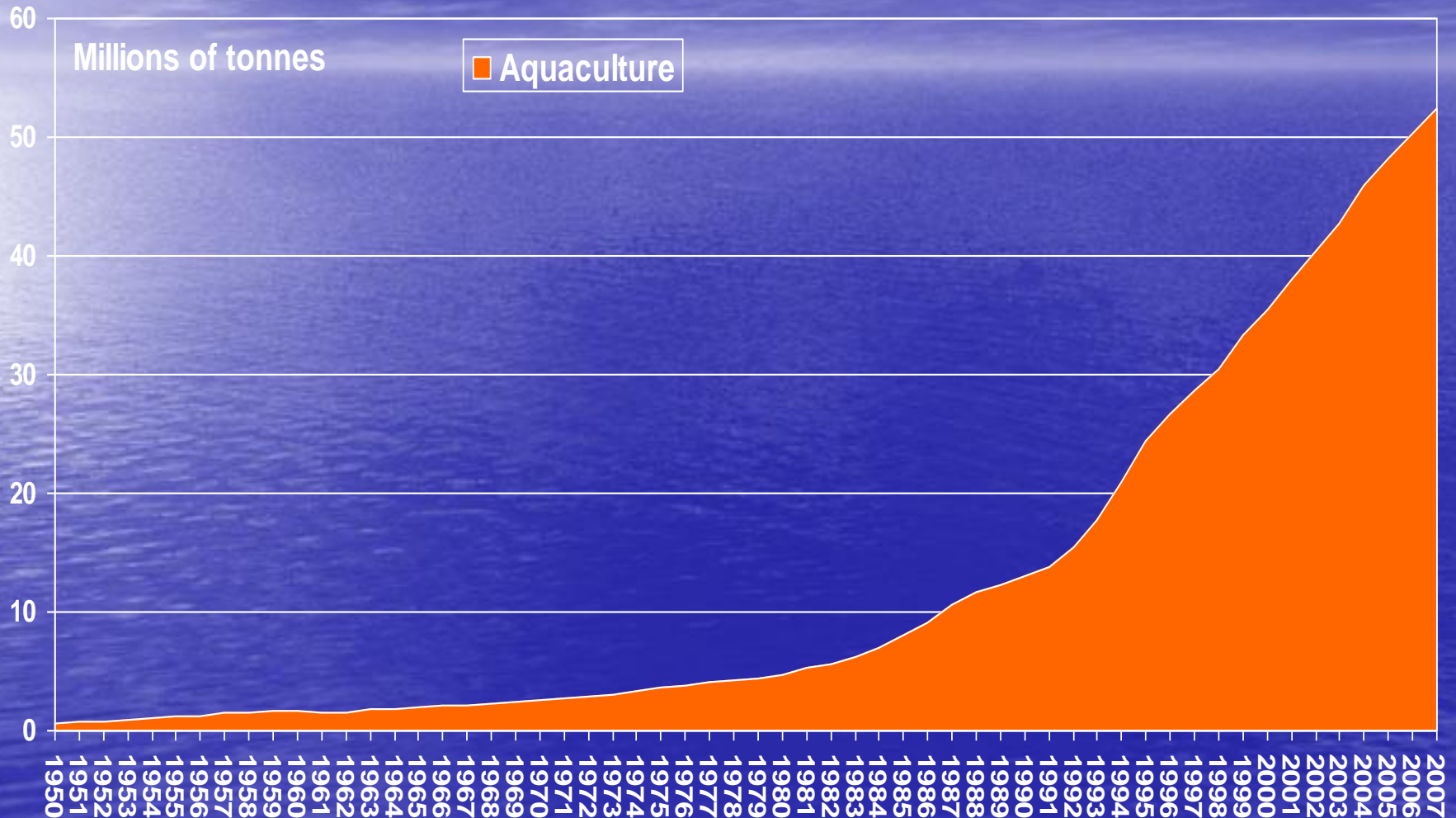
# **World Fish Production 2007 (2006, 2005, 2004)**

■ Catches: 91 (91, 93, 94) mmt

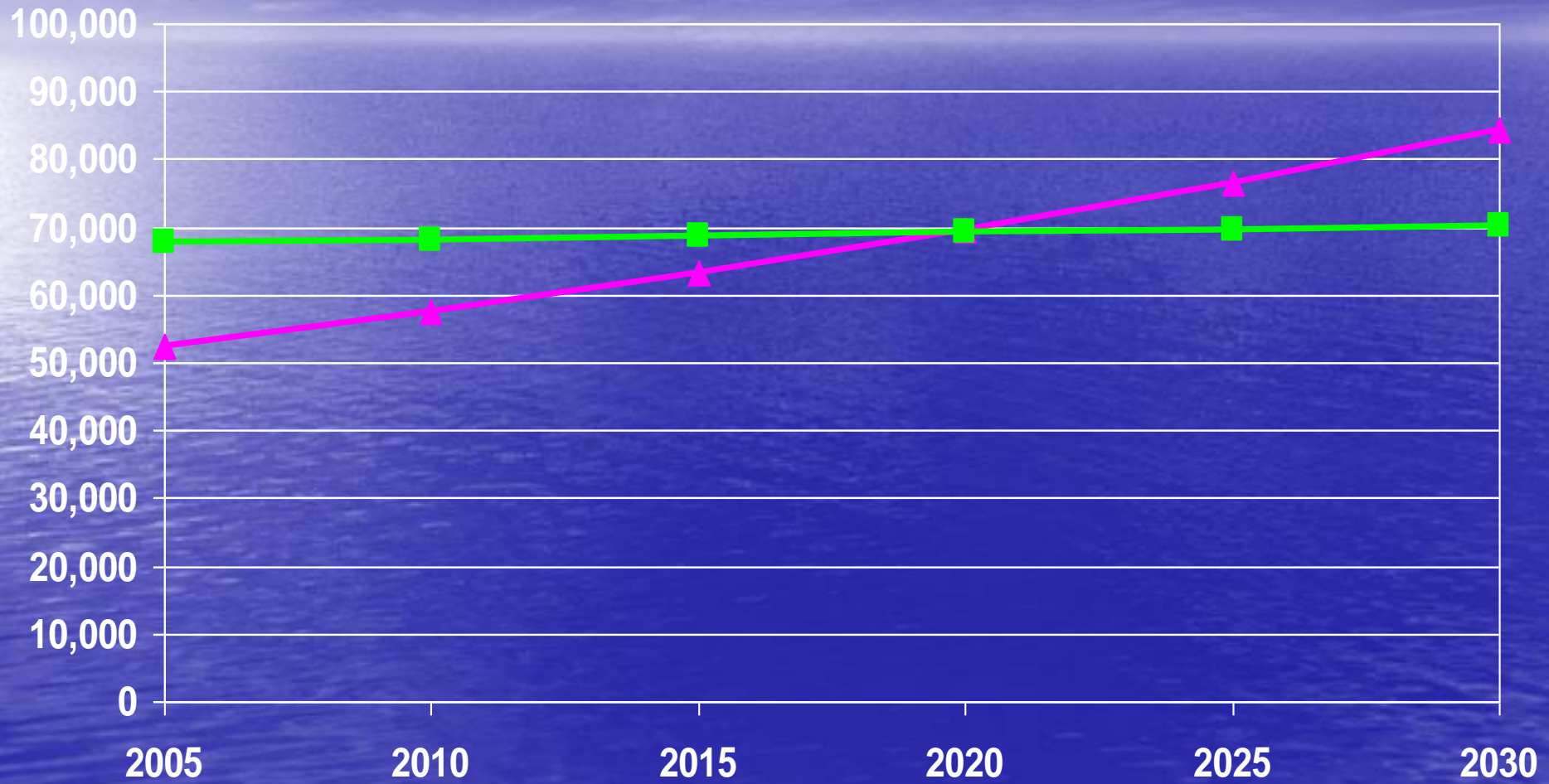
■ Aquaculture: 52 (50, 48, 46) mmt

Total: 143 (141, 141, 140) mmt

# World Aquaculture Production



# World Projections





# Profile of Fish Utilization (million tonnes)

	Global	India
Total Production	143.0	7.13
Human Consumption	108.0	5.80
Non-food uses	35.0	1.33
Per-Capita fish supply (kg)	16.6	4.78

# India : Fisheries Resources

## Marine

– Length of Coastline	8118 km
– Exclusive Economic Zone	2.02 million sq. km
– Continental shelf	0.506 million sq.km
– No of landing centres	1914
– No of Fishing Villages	3827
– Estimated potential	3.9 million tonnes

## Inland

– Rivers and canals	0.19 million km
– Reservoirs	3.15 million ha
– Ponds and tanks	2.36 million ha
– Brackish water	1.24 million ha



# India : Fishing Craft and Fisher Population

Traditional Craft	1,81,300
Motorized Craft	44, 600
Mechanised Vessels	53,700
Total craft	2,79 600
Fisher population	144,850,00

# India – Fish Species Diversity

• Total Fish Species	2200
• Marine	1440
• Freshwater	544
• Coldwater	73
• Brackish-water	143



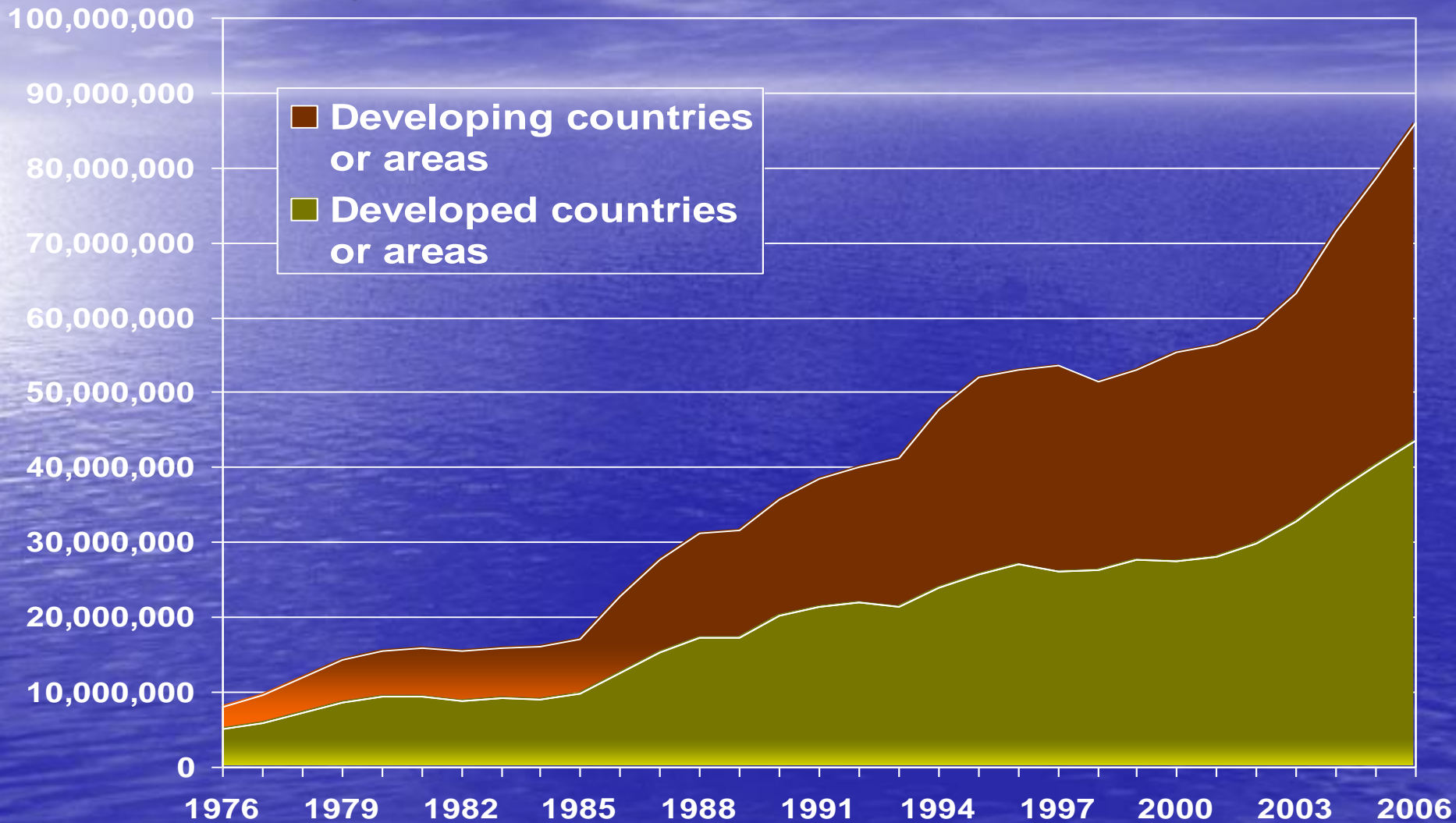
# Indian Fisheries Projections

Area	Production in 2008, million tonnes	Projected production in 2012, million tonnes	Projected production in 2022, million tonnes
Marine capture fisheries	2.91	3.00	3.13
Mariculture	0.01	0.03	0.12
Coastal aquaculture	0.144	0.16	0.34
Inland capture fisheries	0.85	1.20	1.70
Coldwater fisheries	0.0003	0.001	0.01
Freshwater aquaculture	3.22	5.60	7.40
Total	7.13	9.99	12.70
Export	0.62	0.70	0.82
10/Nov/2009	(Rs. 8,000 crore)	(Rs. 10,000 crore)	(Rs. 15,400 crore)



# World Fish Trade: Export Value

- in 1000 US\$ -



# India-Profile of Seafood Exports

World Ranking: 19th Position

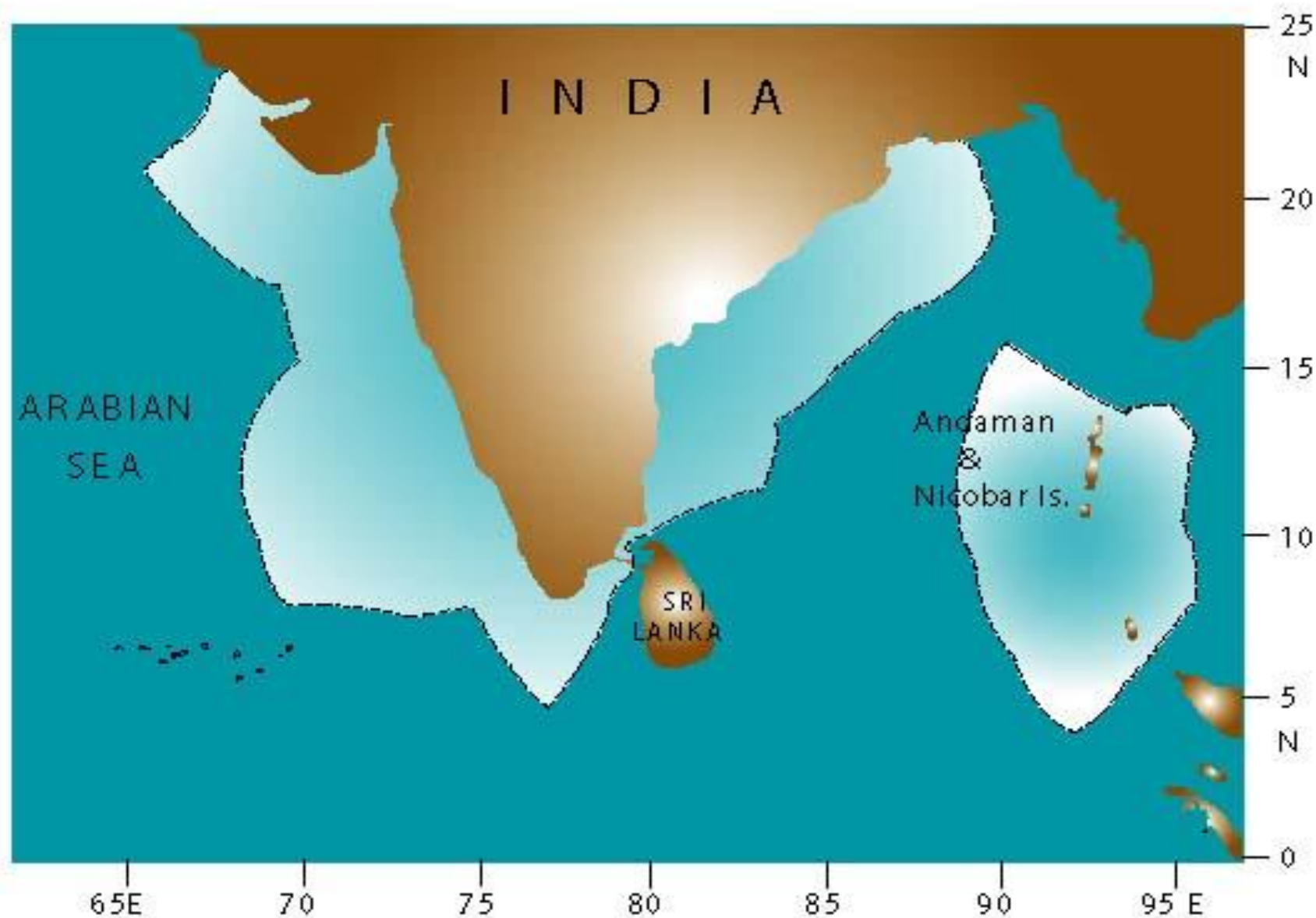
Item	Quantity	Value (US\$)
Total	0.61 million tonnes	1.85 billion
Shrimp	28%	55%
Finfish	17%	--
Cuttle fish	9%	--
Squid	7%	--

# Marine Fisheries Scenario- *Challenges:*

- ≈ Depleting Marine catches
- ≈ Over fishing in coastal waters
- ≈ Highly Perishable and post-harvest loss
- ≈ Weak presence in the EEZ and high seas
- ≈ Low levels of investment



# INDIAN EEZ






# Issues

- Open water, open access
- Multi-species, multi-gear
- Potential Fishing Zones
- Fish Aggregating Devices
- Mesh/season regulations
- Island fisheries (underutilized, poor infrastructure support)
- Ranching

# Comprehensive Marine Fishing Policy

The policy objectives are:

-  to augment marine fish production of the country up to the sustainable level in a responsible manner so as to boost export of sea food from the country and also to increase per capita fish protein intake of the masses,
-  to ensure socio-economic security of the artisanal fishermen whose livelihood solely depends on this vocation.
-  to ensure sustainable development of marine fisheries with due concern for ecological integrity and bio-diversity.



# **MAIN FEATURES OF THE COMPREHENSIVE MARINE FISHING POLICY (CMFP)**

- ✓ Harmonized development of coastal and deep sea sectors
- ✓ Ensure sustainable development of marine fisheries
- ✓ Lay down norms for making EEZ a limited access fishery
- ✓ Evolve procedures for monitoring and control of fishing operations
- ✓ Sensitizing the stake holders about the need for Code of Conduct for Responsible Fisheries (CCRF)
- ✓ To curb Illegal, Unregulated and Unreported (IUU) fishing
- ✓ To manage fishing capacity to prevent over capitalization in the sector and over exploitation of resources
- ✓ To be responsive to regional and international regimes in Marine Fisheries Conservations and Management.
- ✓ Address the requirements of ancillary and Complementary activities such as post harvest care, marketing etc.

# Large Marine Ecosystems (LMEs)

- Regions of ocean space encompassing coastal areas from river basins and estuaries to the seaward boundaries of continental shelves and the outer margins of the major coastal currents
- Relatively larger regions of the order of 200,000 sq km or more



# Large Marine Ecosystems (LMEs)

- Characterized by distinct:
  - Bathymetry
  - Hydrography
  - Productivity
  - Trophically dependent populations



# LMEs:

- Globally there are 64 identified LMEs
- Produce 95% of the world's annual marine fishery biomass yields

# Bay of Bengal (BOB):

- One of the world's 64 LMEs
- Bounded by 8 countries viz. Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka & Thailand
- Southern part merges into the Indian Ocean

# Bay of Bengal (BOB):

- About 20% of world's population resides in the littoral countries of BOB
- Approximately 400 million living in the Bay's catchment area



# Project Overview

- Structured into five inter-linking components:
- Strategic Action Programme, including Trans-boundary issues.
- Coastal/marine national resources management and sustainable use.
- Improved understanding and predictability of the ecosystem.
- Maintenance of ecosystem, health and management of pollution.
- Project management.

# India's interests

- Development of Regional Fishery Management Plan for Shark.
- Development of Sub-regional Fishery Management Plan for Indian Mackerel.
- Development of Sub-regional Fishery Management Plan for *Hilsa* & other migratory species.



# Project Outcome

- a finalized trans-boundary diagnostic analysis,
- agreed strategic action programme,
- institutional arrangements to support the continued development,
- improved well being of rural fisher communities,
- establishment and monitoring of basic health indicators in the BOBLME area,
- capacity building to manage the resources, etc



# Commitments:

- India earlier agreed for total contribution of:
  - US \$ 600,000 in cash
  - US \$ 430,000 in kind
  - For 6 years period
- Later the project cost was scaled down and the project duration was reduced to 5 years
- Contribution to the revised project now would be
  - US \$ 55,000/- p. a. in cash for a period of 5 years
  - US \$ 87,500/- p. a. in kind contribution of about

# Cash Contribution

- Cash contribution would cover:
  - cost of full time contracted National Technical Advisor / National Technical Assistant and Secretary, pro-rata proportion of the salary of the National Coordinator, associated communication and facilities, project related workshops, etc.



# In kind Contributions

- In kind contribution would cover:
  - expenses of the National counterparts, the project Steering Committee Members, National Task Force Members, staff and consultants and pro-rata cost of office space of National Coordinator, National Technical Advisor, etc.



# Progress so far

- Project Document was signed on 22<sup>nd</sup> January, 2009
- FAO was provided with the signature page
- Joint Secretary (Fisheries) was designated as focal point for implementation of BOBLME Project.

# Progress so far

- An amount of Rs. 2.500 million has been provided for the BOBLME project in the budget during 2009-10.
- The inception workshop was held in Colombo, Sri Lanka along with the APFIC Regional Workshop on Ecosystem Approach in Fisheries & Aquaculture during 18-22 May, 2009.



# Progress so far

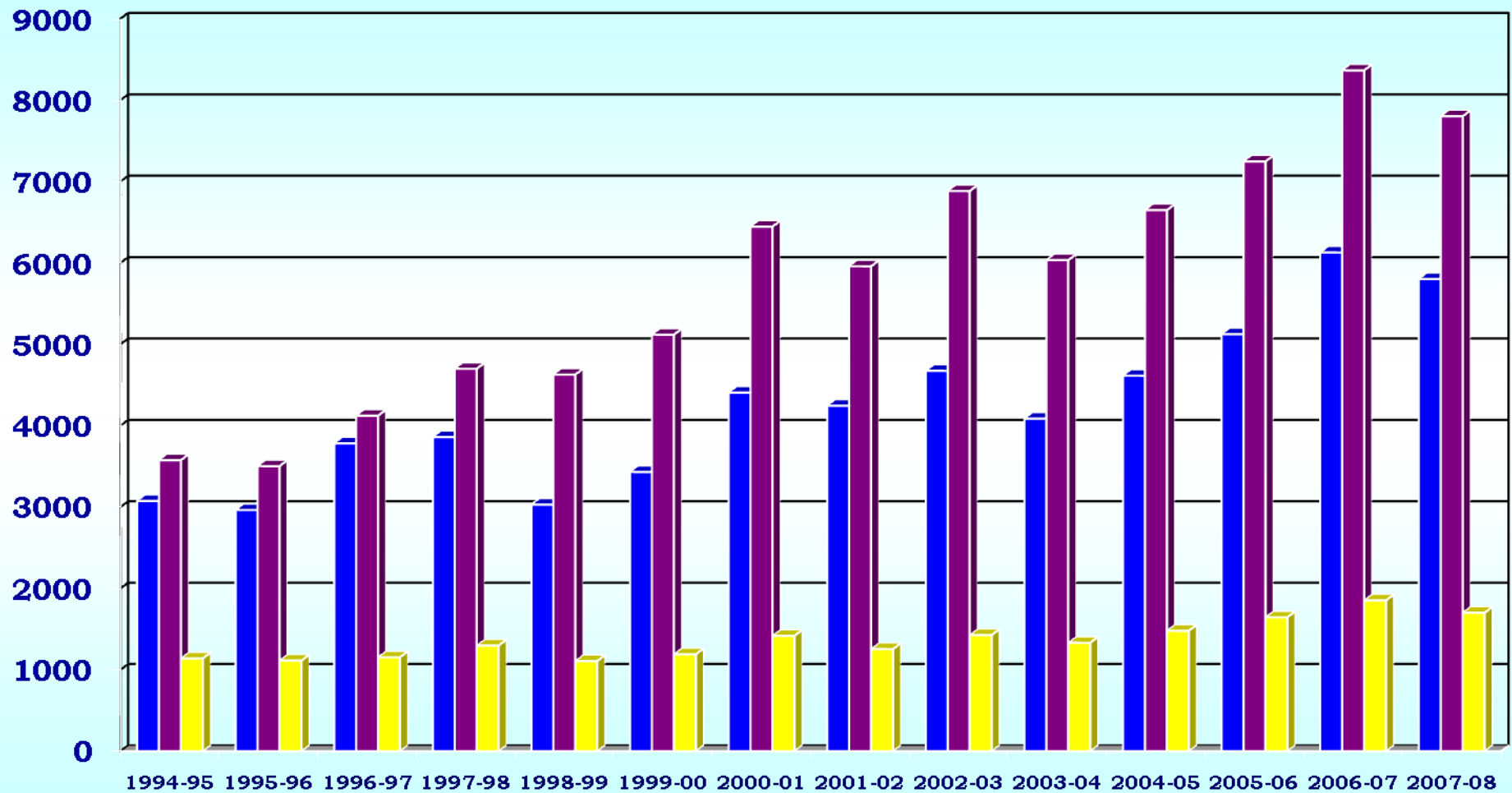
- India's representative attended the meeting, where working arrangements for the project were further discussed.
- Nominations of the Indian representatives for the Project Steering Committee and National task force etc. is under process.



# Thank You



# Export Growth of Fish Products



■ Qty '00 mt

■ Value Rs. Crores

■ Value US \$ Million



# Marine Capture Fisheries

## Sustainable production

Present annual production	2.91 m t
Projected production, 2011-12	3.00 m t

## Strategy

- ⌘ Regulated fishing and capacity management in mechanized sector.
- ⌘ Conservation, sea ranching , FAD's
- ⌘ Diversified fishing in Deep sea & Oceanic resources



# Major Trading Partners

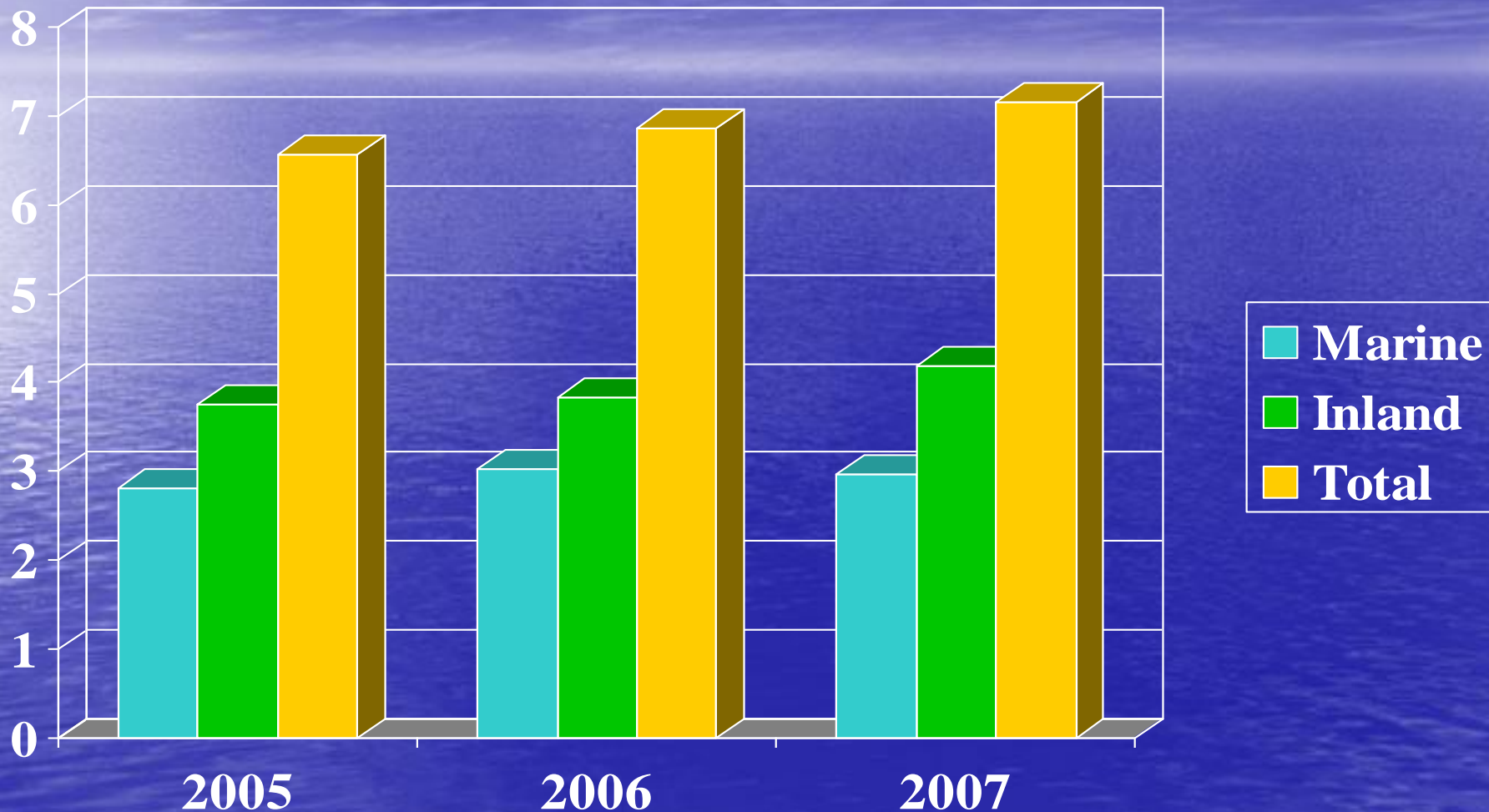
Market	Share(%)
European Union:	34
Japan :	16
USA :	16
China :	14

# INDIAN FISHERIES

Present fish Production	7.13 mmt
<i>Inland</i>	<i>4.22 mmt</i>
<i>Marine</i>	<i>2.91 mmt</i>
Primary sale value	~ Rs. 42,000 crore (US \$ 9 bn)
Fish seed production	31,688 million fry
Hatcheries	1,070
FFDA	422
BFDA	39
Export	Rs. 8,000 crore



# India: Fish Production – Growth (MT)



# Indian Fish Facts

- ~ 4.7% of global production
- ~ 1.07% of GDP
  - ~ 5.34% of Agriculture GDP
- ~ 2.5% of global trade
- ~ 18% of National Agricultural Exports