

A Macroeconomic Approach to Underlying Driving Forces of the Depleting Marine Fisheries in PRC with Economies in Transition

Yuzhu Li

Institute of Population Research Peking University Beijing PRC Oct. 13th,2003







Data sources

 Analysis of demand and supply of marine fisheries

Discussion



Introduction

Background

- Main idea of this paper:
 - Use macroeconomic method to study marine fishery problem
- Demand analysis and supply analysis
- Dilemma and policy suggestion



Data sources

China statistical yearbook(2002)
China marine statistical yearbook (2002)
Website of state statistical bureau in PRC



- Dynamic change of the aquatic production price
- Income distribution and aquatic food consumption
- Changes of population size, income and aquatic as well as marine aquatic production



Soaring-up aquatic products price index with economies in transition





Comparison of per capita food composition among different income groups in Urban Chin	1a, 1	.99	99
---	-------	-----	----

Income Groups		Lowest	Low	Below-Medium	Medium	Over-Medium	High	Highest
Grain	Yuan	200	209	215	212	216	224	240
	%	30.4	27.6	25.9	23.6	22.4	21.4	21.0
Poultry	Yuan	288	340	378	415	451	492	525
	%	43.7	44.9	45.5	46.4	46.5	47.1	45.9
Eggs	Yuan	53	59	62	66	70	72	80
	%	8.1	7.8	7.5	7.4	7.2	6.9	7.0
Aquatic products	Yuan	90	112	128	146	163	179	206
	%	13.7	14.8	15.4	16.3	16.8	17.1	18.0
Milky products	Yuan	27	37	47	56	69	78	93
	%	4.1	4.9	5.7	6.3	7.1	7.5	8.1
Total	Yuan	658	757	830	895	969	1045	1144
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0



700

Increasing demand for aquatic and marine aquatic product in accordance with the growing buying power with economies in transition





Supply Analysis for Marine fisheries

 Relationship between the marine catchers and the fishing effort
 The different supply structure between marine catchers and mariculture



Supply Analysis for Marine fisheries

Change of total marine catches and fishing efforts with economies in transition





Supply Analysis for Marine fisheries

Comparison of the Output Structure of the Mariculture and the Marine Catchers, 2001

		Marine Catchers	Mariculture production
Fish	Tons	9632356	494725
	%	66.8	4.4
Shrimp and Crab	Tons	2564944	457078
a la de antes	%	17.8	4.1
Shellfish	Tons	1709939	9112435
	%	11.9	80.5
Algae	Tons	26687	1214810
	%	0.2	10.7
Others	Tons	472218	36275
	%	3.3	0.3
Total	Tons	14406144	11315323
	%	100.0	100.0



Discussions:dilemma

 Demand aspect: growing economic results in soaring-up demand for marine fishery

- Supply aspect: declining resource restricts the supply of marine fishery
- Dilemma: contradiction between demand and supply



Discussions:policy suggestion

Restrict the supply/demand is not a good idea
Execution of these kind of policy is very hard
It can only provide a low level equilibrium
The solution maybe lies in mariculture
Enhance the devotion of fund and technology
Policy support



Thank you!

