THE STATUS OF WORLD AQUACULTURE*

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*Data source: R. Subasinghe, FAO, 2006

- Aquaculture, probably the fastest growing food-producing sector, now accounts for almost 50 percent of the world's food fish and is perceived as having the greatest potential to meet the growing demand for aquatic food.

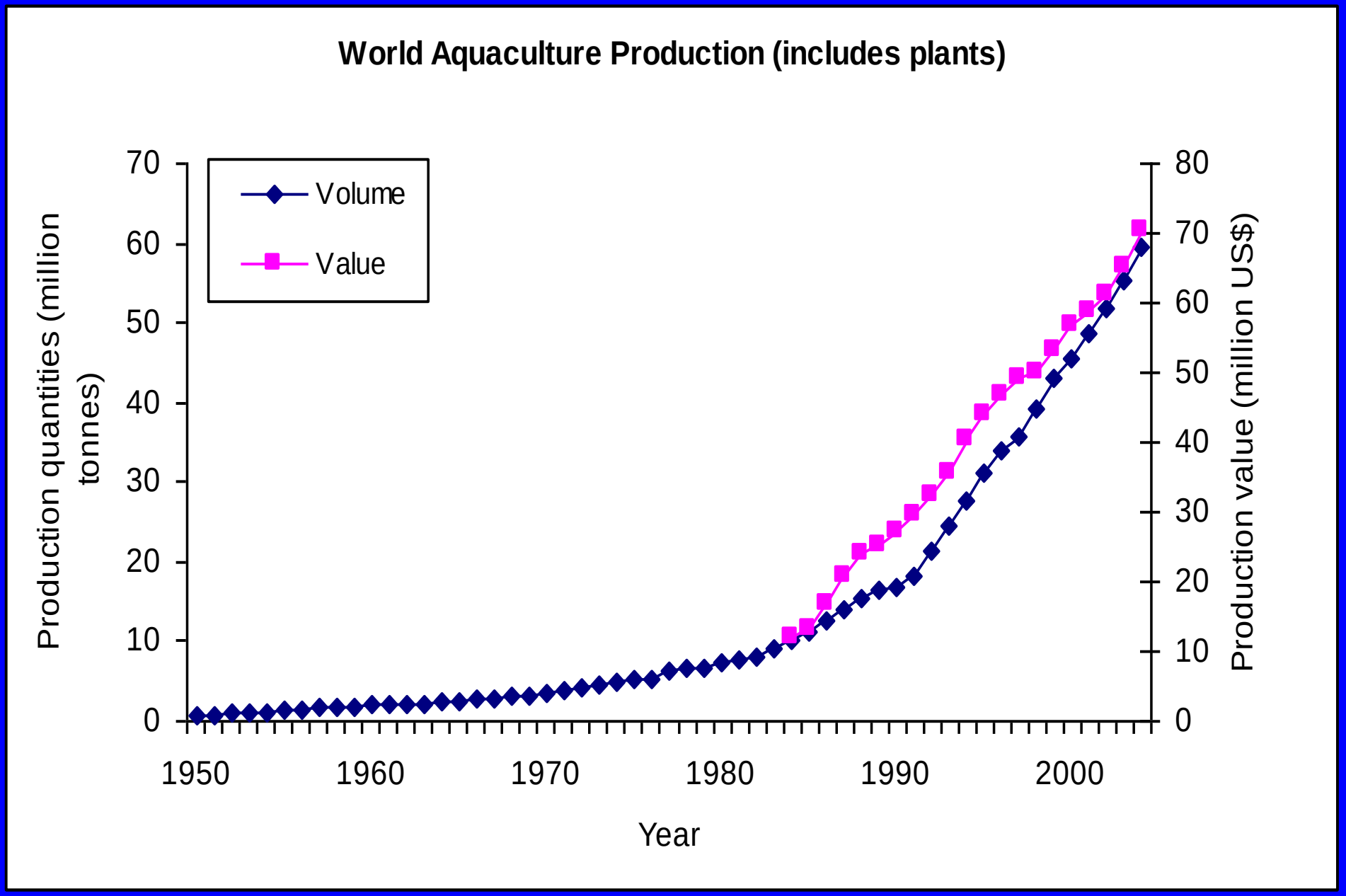
- Given the projected population growth over the next two decades, it is estimated that at least an additional 40 million tonnes of aquatic food will be required by 2030 to maintain the current per caput consumption.

- Total aquaculture production of aquatic animals (excluding aquatic plants) for 2004 was reported to be 45.5 million tonnes with a farm-gate value of US$ 63.4 billion.

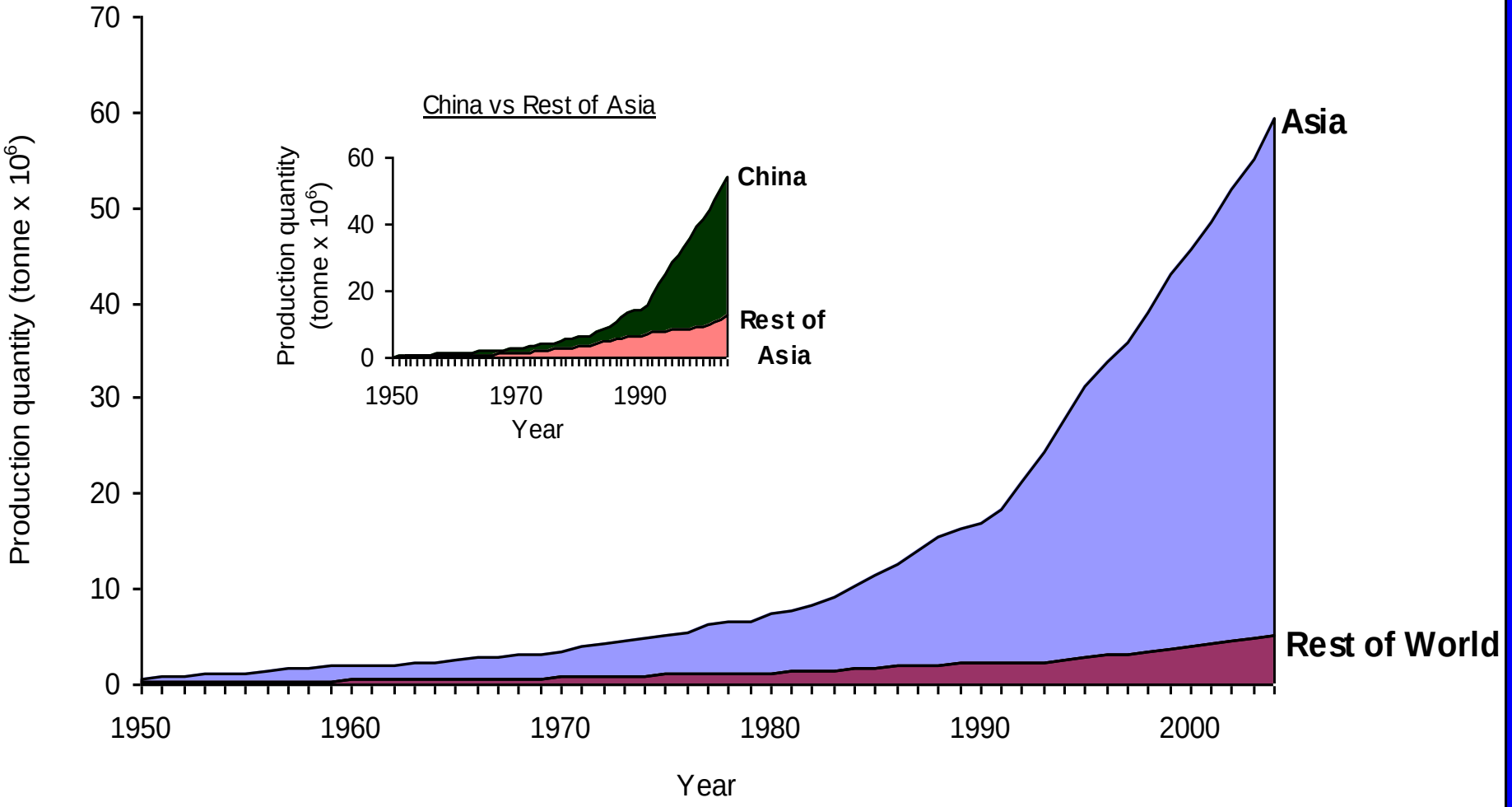
- With the inclusion of aquatic plants, the production increases to 59.4 million tonnes with a value of US$ 70.3 billion.

- Reported growth in global aquaculture remained strong as these figures represent an increase in production of 7.7% from the total aquaculture production reported for 2003, and a 6.6% increase when only aquatic animals are considered.

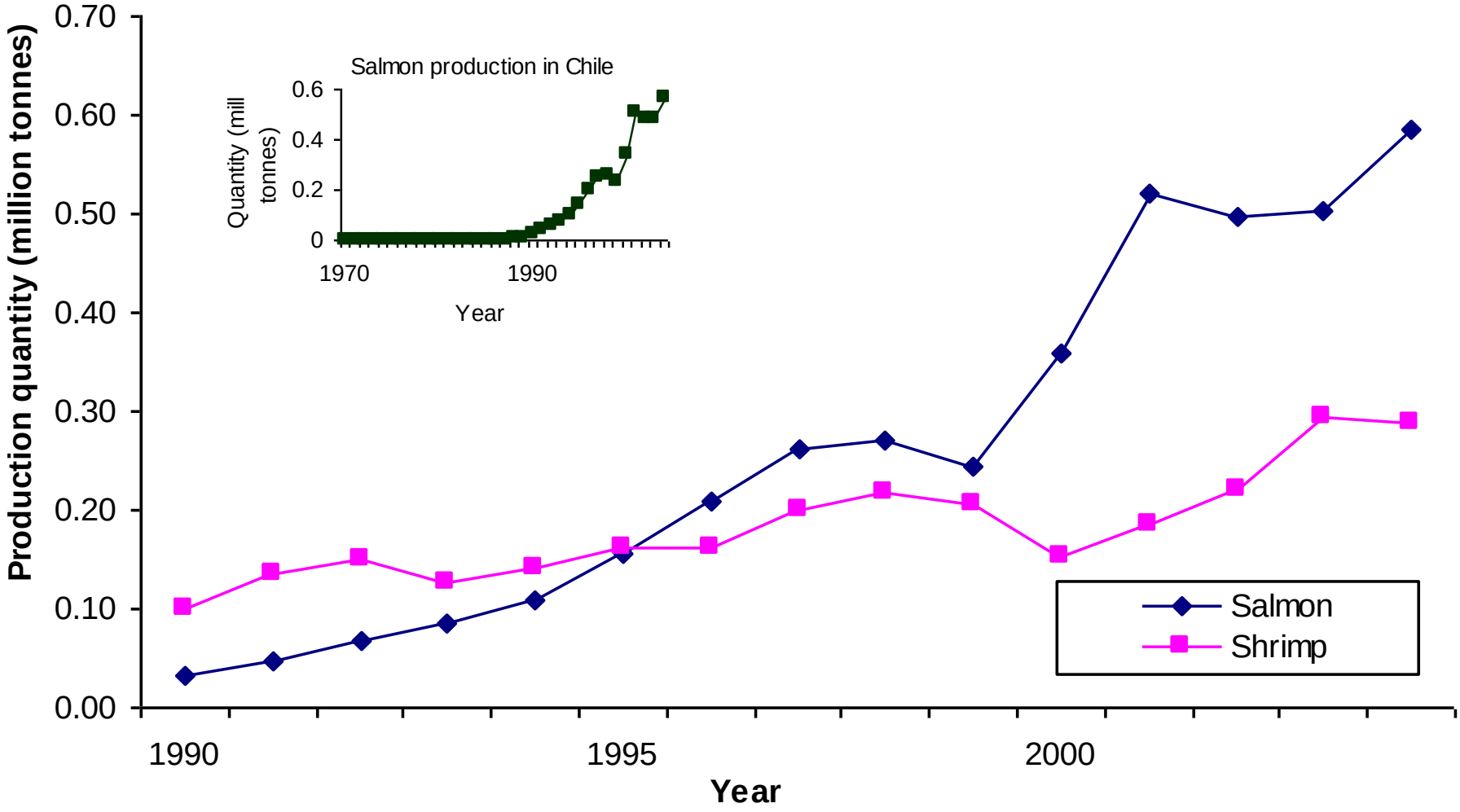
- Considering the ten-year period from 1994-2004, total aquaculture production shows an average annual increase of 7.9%.


World Aquaculture Production (includes plants)
Volume
Value
Production quantities (million tonnes)
Production value (million US$)
Year
0
10
20
30
40
50
60
70
80
1950
1960
1970
1980
1990
2000

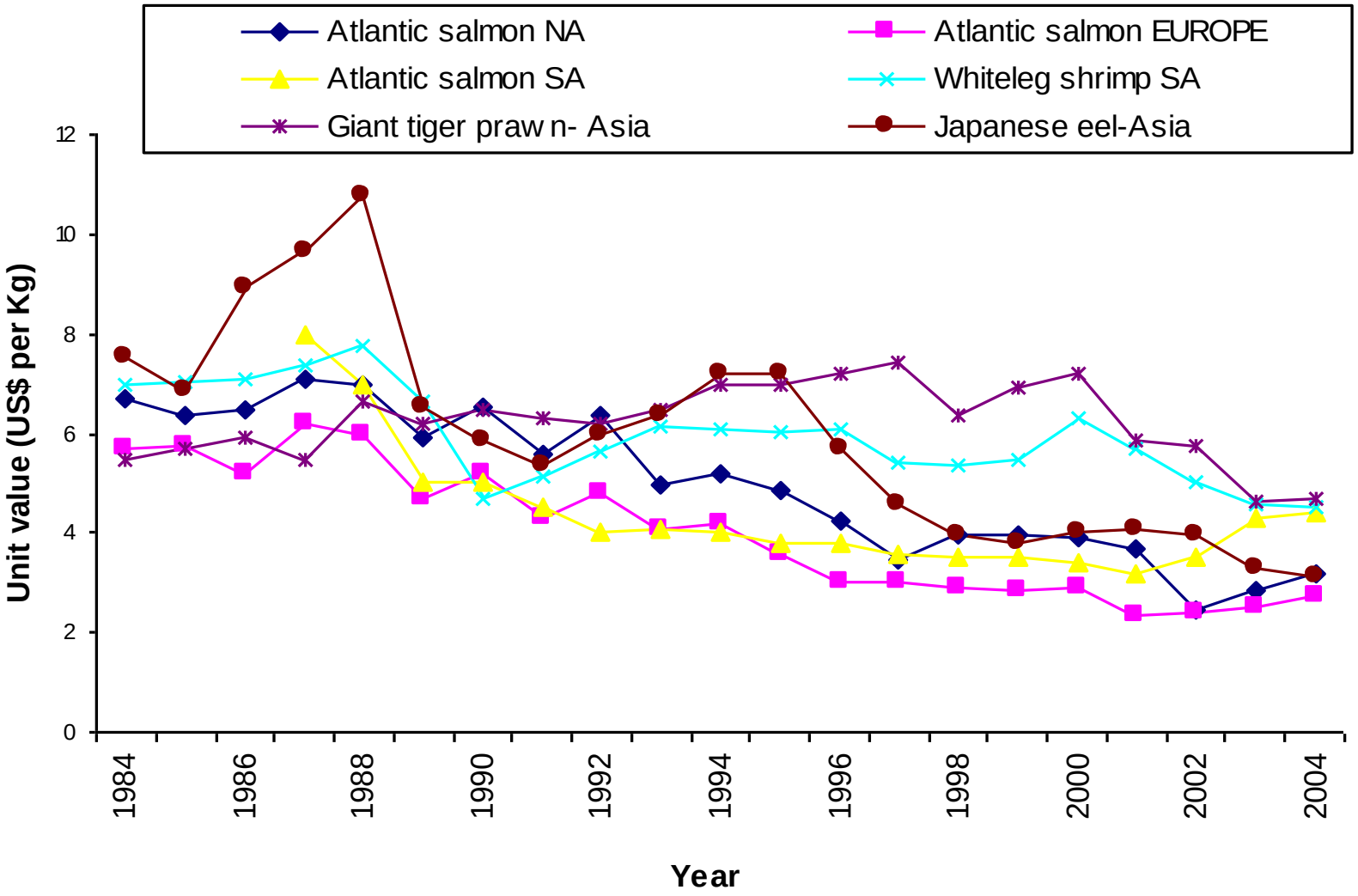
Global aquaculture production



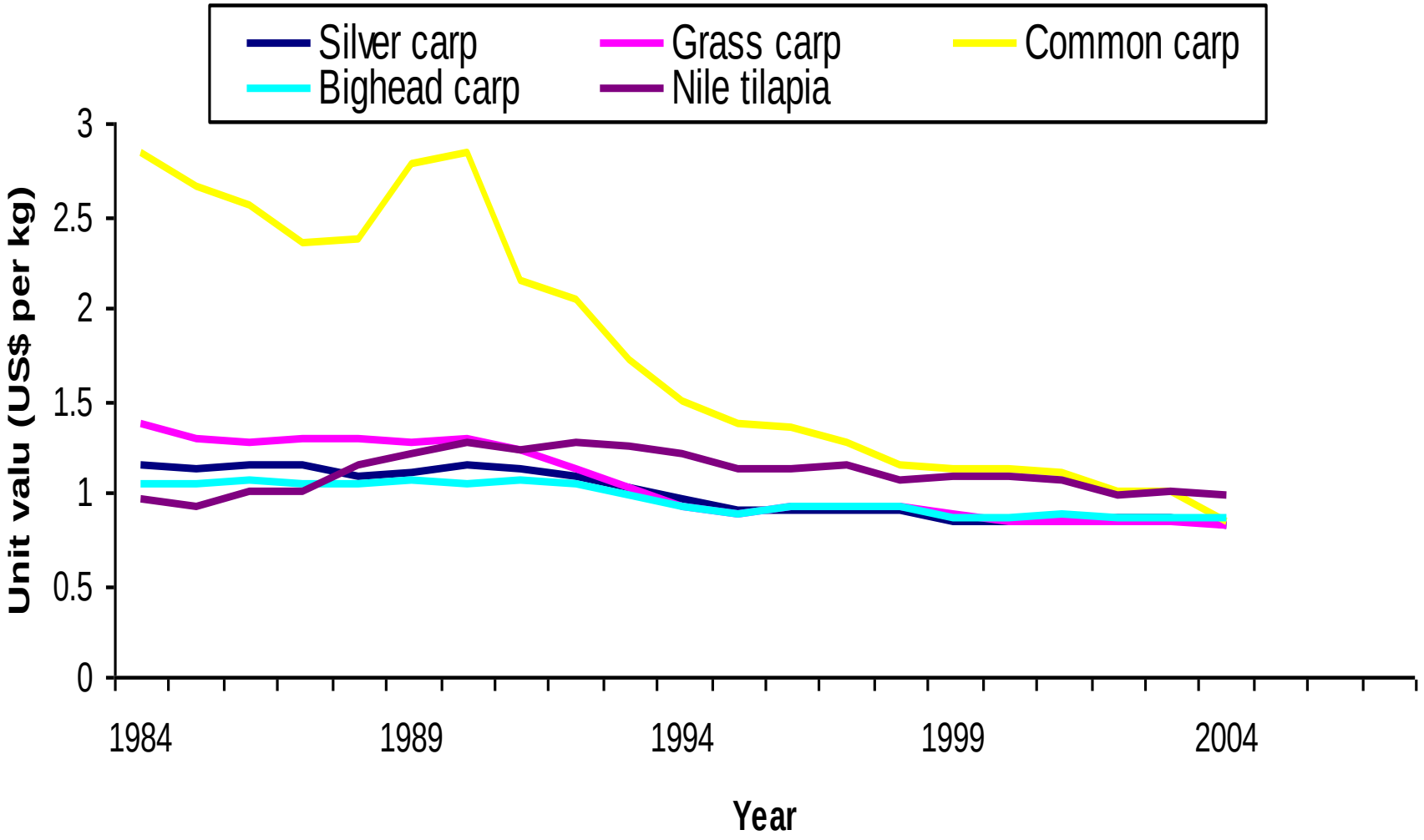
Total production of Salmon and Shrimp in Latin America and Caribbean Region

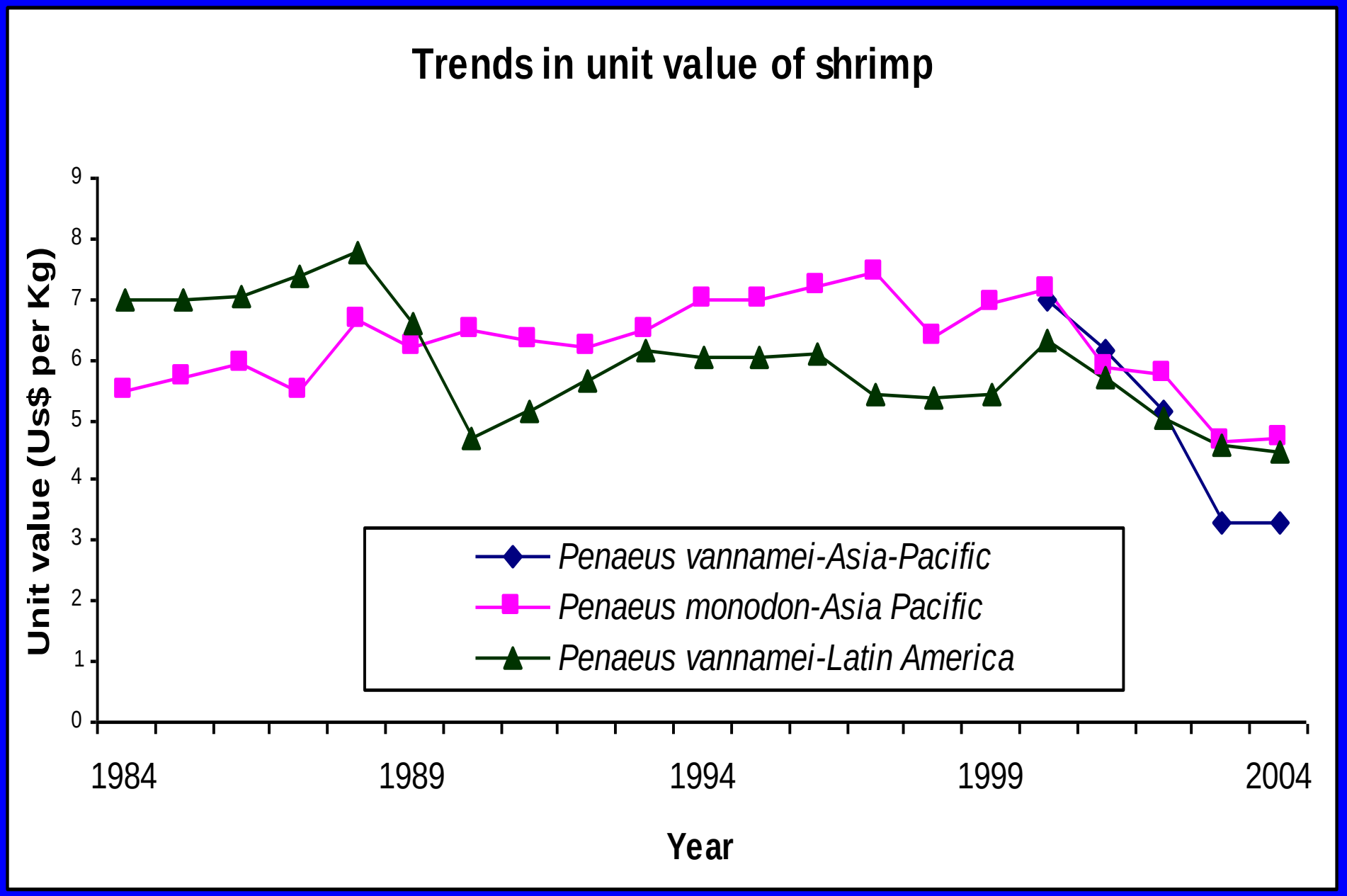


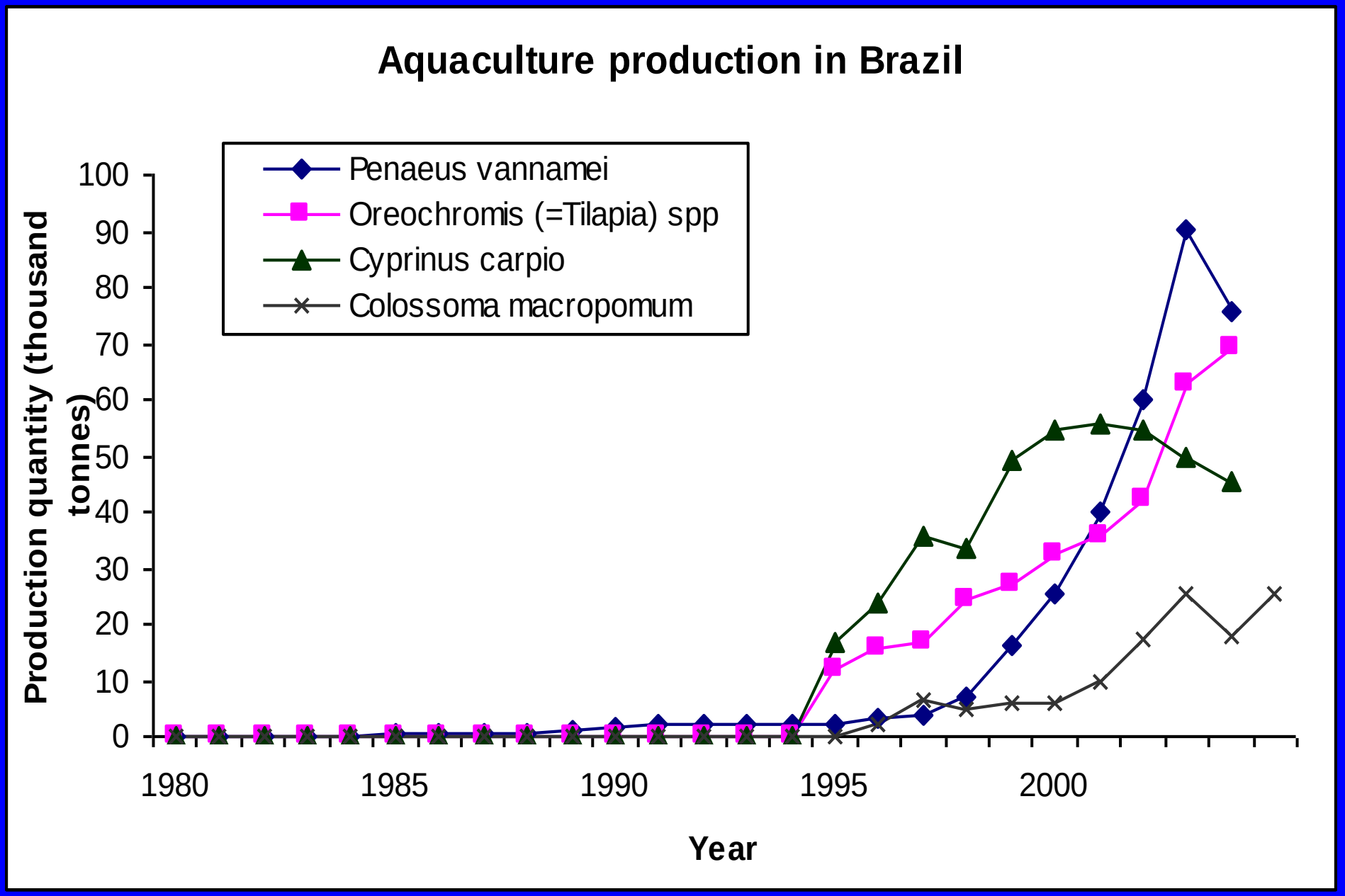
Trend in the unit values of selected high-value species in selected top producing regions, 1984 to 2004



Trend in the unit values of selected lower-value species in Asia, 1984 to 2004




Trends in unit value of shrimp
Unit value (Us$ per Kg)
9
8
7
6
5
4
3
2
1
0
1984
1989
1994
1999
2004
Year
Penaeus vannamei-Asia-Pacific
Penaeus monodon-Asia Pacific
Penaeus vannamei-Latin America


Aquaculture production in Brazil
Penaeus vannamei
Oreochromis (=Tilapia) spp
Cyprinus carpio
Colossoma macropomum
Production quantity (thousand tonnes)
100
90
80
70
60
50
40
30
20
10
0
1980
1985
1990
1995
2000
Year

Major Trends in Global Aquaculture

- Continuing intensification of aquaculture production
  - availability of sites for aquaculture is becoming increasingly limited
  - ability to exploit non-agricultural land is restricted
  - along with economic drivers, the aquaculture production systems are being increasingly intensified.

Major Trends in Global Aquaculture

- Continuing diversification of species use
  - new species options, particularly high value species (marine), in regions and countries where aquaculture is well established
  - reduction in facilities for producing low value high volume species such as cyprinids
  - reduction in freshwater aquaculture areas may partly be offset by expansion in marine areas

Major Trends in Global Aquaculture

- Continuing diversification of production systems and practices
  - uneconomic agriculture systems may diversify into aquaculture
  - uneconomic aquaculture practices may diversify for profits
  - secondary use of water bodies for aquaculture is increasing
  - polyculture or integrated culture (particularly in marine systems) not only diversify products but also improve efficiency of resource use and reduce negative environmental impacts.

Major Trends in Global Aquaculture

- Increasing influence of markets, trade and consumers
  - fish consumption is increasing, particularly in Asia, and this domestic and regional demand competes with export markets
  - greater value adding and development of processed products for export markets
  - the choice of species is becoming geared to the demand for products in the international markets
  - targeting urban markets with standardized, value added “easy-to-cook” or ‘supermarket-type’ products.

Major Trends in Global Aquaculture

- Enhancing regulation and improving governance
  - aquaculture is maturing as a responsible sector
  - emphasis on better enforcement of existing legislation is becoming apparent
  - strong emphasis is being placed on increasing self-regulation
  - general trend towards improving governance in aquaculture development and management.

Major Trends in Global Aquaculture

- Drive towards better management of the sector
  - instead of high yield per unit area, aquaculture is now aiming more on economic sustainability and overall competitiveness
  - a key area considered is the improved management of health
  - this trend does not only focus on production and practice, but also the issue of acquiring quality inputs like clean seed and quality feed, and sound advice to reduce risks of production failures
  - combined effect is to drive the sector towards improved or better management
  - at the individual farm level as well as specific sub-sectoral levels
  - this does not occur worldwide; although in the future it will materialize as different pressures are applied (regulatory, market, environmental or social etc.)

THANK YOU